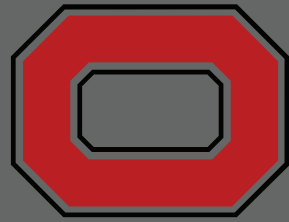


2016 Space Needs Assessment for Framework 2.0



THE OHIO STATE UNIVERSITY





EXECUTIVE SUMMARY

Ayers Saint Gross was charged with conducting a space needs assessment for The Ohio State University as part of Framework 2.0. The assessment quantifies the amount of space the university currently has and how much space it needs now. These needs are then compared to the space inventory after FY2016 capital construction is completed. An additional scenario was modeled to identify space needed in order to accommodate the Discovery Themes Initiative. The assessment then compares how much space Ohio State has to how much is needed to generate the space overage (surplus) or space need (deficit) for each scenario.

INTRODUCTION

The space needs assessment is quantitative; although, the existing quality of space plays a major role in the perceived need for space and completes the picture about space at an institution. All space is identified in terms of indoor net assignable square feet (NASF). It excludes public corridors, stair wells, mechanical rooms, public restrooms, and structural areas.

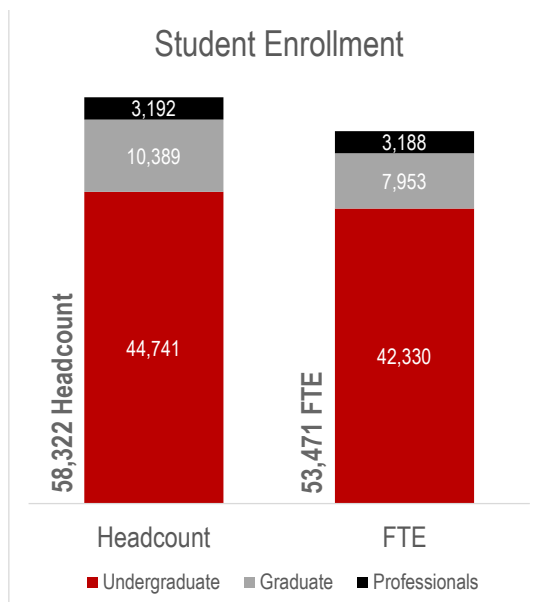
The needs assessment is developed by space category and then distributed by primary unit. The colleges, schools, and major administrative areas are included as primary units. The space metrics used to generate the analysis are from normative metrics applicable to institutions similar to Ohio State and the experience of the consultant team.

On-campus individual work sessions were held with a wide range of Ohio State stakeholders. The Provost, vice presidents, deans, and directors supplied empirical information that helped formulate the needs assessment.

The data used in the assessment was provided by the university using Fall 2014 as the snapshot in time. Ohio State supplied Fall 2014 course data with enrollments, employee data, and the target enrollment growth.

BASELINE

For Fall 2014, the Columbus campus had 58,322 headcount students equating to 53,471 student full-time equivalents (FTE). The Health Sciences units are assumed to have about nine percent (9%) of this total or 5,242 student headcount equal to 4,889 student FTE.



FACILITIES INCLUDED IN ASSESSMENT

The Ohio State University has a total of 19.4 million NASF, of which 9.6 million NASF was addressed in the space needs assessment. Hospital space including the veterinary medical center, housing, farms, and non-academic airport space were excluded from the study as well as parking garages, bus shelters and non-institutional agency space.

POST CONSTRUCTION FACILITIES

The post-construction scenario includes renovations for buildings or new construction that are funded or approved for construction. These include:

- Pomerene Hall Renovation
- Oxley Hall Renovation
- Koffolt + Fontana Laboratories Renovations
- Postle Hall Replacement – Phase I
- Jameson Crane Sports Medicine Institute
- Covelli Multi-Sport Arena
- Student Athlete Development Center
- Schottenstein Concourse Renovation + New Offices

Space Needed to Accommodate

Discovery Theme Growth

168 New Faculty

	Total NASF Needed
<i>Research Space</i>	<i>129,200</i>
<i>Research Core Space</i>	<i>10,336</i>
Total Research Space	139,536
Vivaria Space	10,908
Office Space	43,235
Physical Plant	7,747
TOTAL	201,426

DISCOVERY THEME GROWTH ASSUMPTIONS

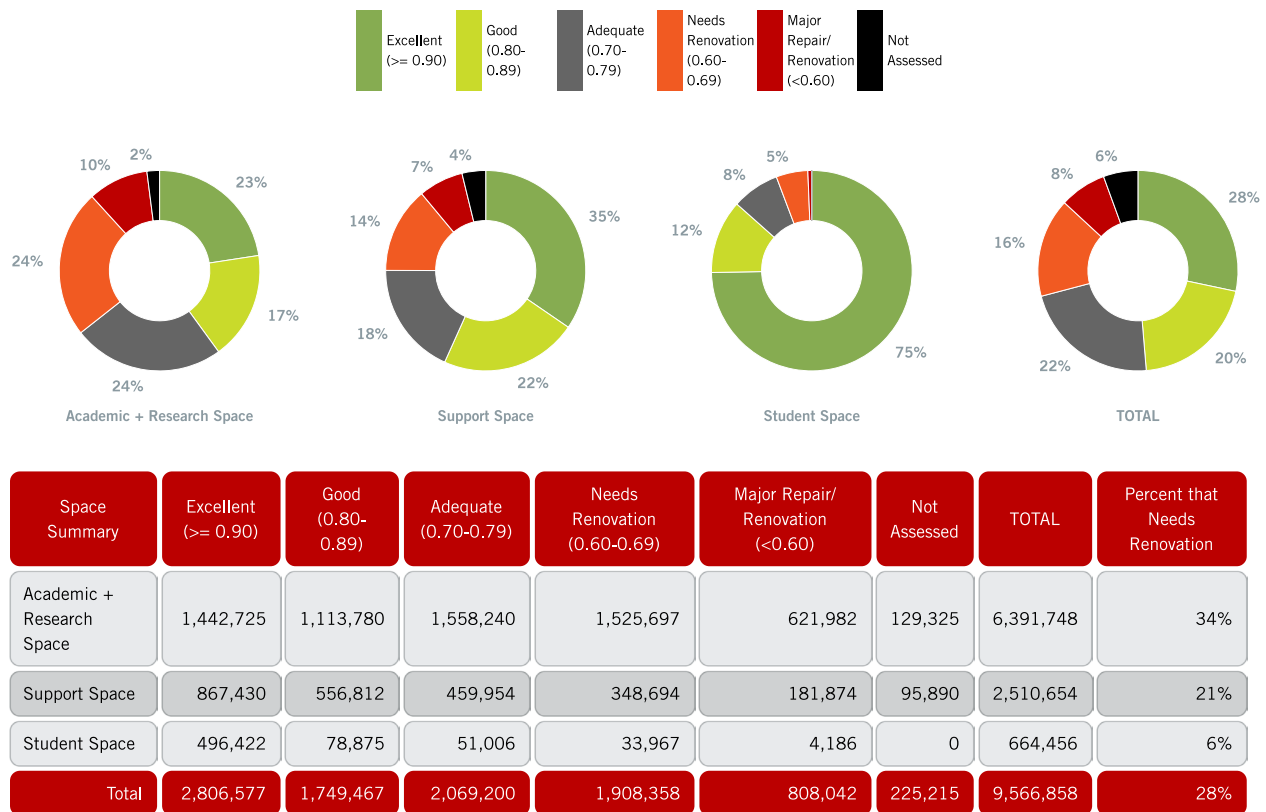
The Discovery Themes scenario includes growth expectations set by the Office of Academic Affairs. The faculty projections account for retiring faculty and are net new faculty. New employee hires include: 168 faculty; 25 professional/non-faculty staff; and 32 support staff.

BUILDING QUALITY OF SPACE

The consultant team took each building's facility condition index (FCI) and applied it to the interior spaces by space category to give a general indication of quality of space. Overall about 24% of Ohio State's space are in buildings that need renovation (FCI of 0.60-0.69) or need major repair or renovations (FCI of less than 0.60).

Instructional space (classrooms, class laboratories, and open laboratories) has the largest percentage of their space in poorer quality buildings at 36% and the least amount of space in excellent or good facilities at only 37%. Research laboratories and other academic space (which includes academic offices and library space) are in similar shape with research labs being in slightly worse shape.

Building Quality of Space



On the other end of the spectrum, student space by and large is located in excellent and good buildings with only five percent (5%) in space that needs renovation. Athletics also has a large percentage of its space in excellent and good condition with 19% of its facilities in buildings that need major repair or renovation.

The College of Business, College of Public Affairs, College of Public Health, Legal Affairs, and Business Advancement consist of almost entirely Excellent or Good space. Conversely, the College of Pharmacy, College of Dentistry, College of Engineering, and Administration and Planning feature the highest percentage of space which needs renovation or major repair.

OVERVIEW OF OUTCOMES

Classroom Utilization

- The classroom utilization targets set for this study are 35 hours per week with a 70% seat fill rate which is 22.4 weekly seat hours.
- On average, the Main Campus schedules its 438 classrooms for 27 hours per week at a 63% seat fill rate. This equates to 21.6 weekly seat hours. Classrooms that are centrally scheduled are closer to the targets at 30 hours per week with a 65% seat fill rate.
- The Health Sciences Campus has 82 classrooms. The scheduling data for the majority of these rooms was incomplete and therefore; the utilization rates are not reliable.

Scheduled Classroom Use by Day and Time - Fall 2014

(Darker colors indicate a large percentage of rooms are scheduled.)

5:30 PM	28% 121 Rooms	43% 189 Rooms	28% 123 Rooms	40% 174 Rooms	6% 26 Rooms	29% 127 Rooms
4:10 PM	40% 174 Rooms	63% 274 Rooms	48% 209 Rooms	62% 273 Rooms	28% 121 Rooms	48% 210 Rooms
3:00 PM	50% 221 Rooms	75% 330 Rooms	68% 297 Rooms	79% 345 Rooms	53% 234 Rooms	65% 285 Rooms
2:20 PM	53% 234 Rooms	72% 315 Rooms	69% 301 Rooms	74% 324 Rooms	59% 260 Rooms	66% 287 Rooms
1:50 PM	55% 240 Rooms	70% 306 Rooms	70% 308 Rooms	70% 307 Rooms	60% 262 Rooms	65% 285 Rooms
12:45 PM	50% 218 Rooms	75% 330 Rooms	73% 318 Rooms	74% 326 Rooms	66% 289 Rooms	68% 296 Rooms
11:30 AM	62% 272 Rooms	79% 346 Rooms	81% 353 Rooms	78% 340 Rooms	75% 330 Rooms	75% 328 Rooms
11:10 AM	51% 222 Rooms	72% 317 Rooms	71% 313 Rooms	72% 314 Rooms	68% 297 Rooms	67% 293 Rooms
10:20 AM	53% 230 Rooms	76% 335 Rooms	72% 314 Rooms	76% 335 Rooms	68% 297 Rooms	69% 302 Rooms
9:35 AM	55% 239 Rooms	79% 345 Rooms	74% 326 Rooms	78% 342 Rooms	70% 305 Rooms	71% 311 Rooms
9:10 AM	53% 230 Rooms	47% 206 Rooms	63% 277 Rooms	47% 204 Rooms	59% 258 Rooms	54% 235 Rooms
8:30 AM	33% 144 Rooms	46% 200 Rooms	46% 201 Rooms	47% 204 Rooms	40% 177 Rooms	42% 185 Rooms
8:00 AM	29% 128 Rooms	43% 189 Rooms	42% 183 Rooms	45% 196 Rooms	39% 169 Rooms	39% 173 Rooms
	Monday	Tuesday	Wednesday	Thursday	Friday	*Average

Total classrooms = 438

- Peak times on campus are from 9:35AM through 3:00PM, Monday through Thursday. The most utilized time slot is 11:30AM for all days except Mondays. The 8:00AM and 5:30PM slots are underutilized with some instances of only six percent of rooms in use.
- Enarson Classroom Building has the largest number of classrooms (32) with Campbell Hall and Smith Laboratory tied for the second largest number of classrooms (21). However, these rooms do not meet the utilization targets. On the Health Sciences campus, Graves Hall has the largest number of classrooms with 19 rooms.
- Denny Hall classrooms have the highest seat fill rate at 97%, and Mason Hall has the highest weekly room hours at 50 hours. On the Health Sciences Campus, Cunz Hall is the best utilized building with 35 weekly room hours and a 70% seat fill rate.

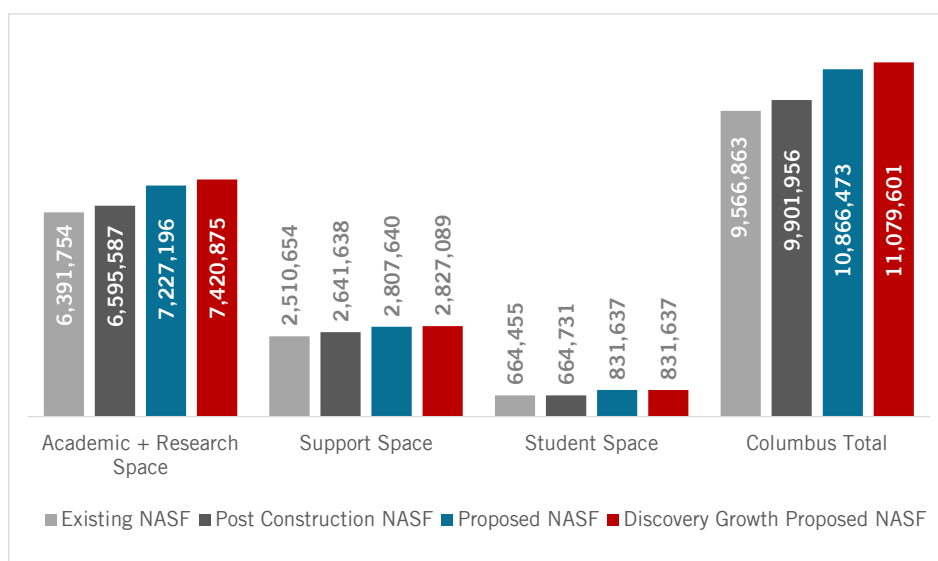
Class Laboratory Utilization

- The utilization targets established for this study are 20 hours per week with an 80% seat fill rate. This is an average utilization rate. Some disciplines will not be able to meet the 20 hours per week target because there is a need to allow the lab to be used for individual practice. Eighty percent seat fill rate should be a target regardless of discipline.
- On the Main Campus, there are 238 class laboratories. These labs are scheduled an average of 21 hours per week with a 68% seat fill rate for a 17.0 weekly seat hour average. The Health Sciences Campus has 42 class laboratories that have a weekly scheduled use of five hours at a 31% seat fill rate for an average of 8.6 weekly seat hours.
- Of the 238 labs on the Main Campus, 65% of the labs are housed within the College of Arts and Sciences. The College uses the labs 23 hours per week, which exceeds the target of 20 hours. The College of Engineering has 37 labs that are used approximately 19 hours per week.
- Included in the 238 labs, Chemistry + Biochemistry, Art, and the Center for Life Science Education have over 10 labs each and efficiently schedule and use the labs with high weekly room hours and seat fill rates. Many of these rooms far exceed the utilization expectations which results in a need for additional laboratory space in these disciplines.
- On the Health Sciences Campus, the College of Pharmacy and the College of Public Health fill their lab seats very well at 95% and 93% respectively.

Space Needs Assessment – Fall 2014

- For Fall 2014, the university-wide space needs assessment shows a 12% deficit. These needs are based upon a variety of space metrics employed in the assessment.
- The largest categories of need are class laboratories, library and study space, research laboratories, and classrooms.

Space Needs Assessment by Space Category Summary



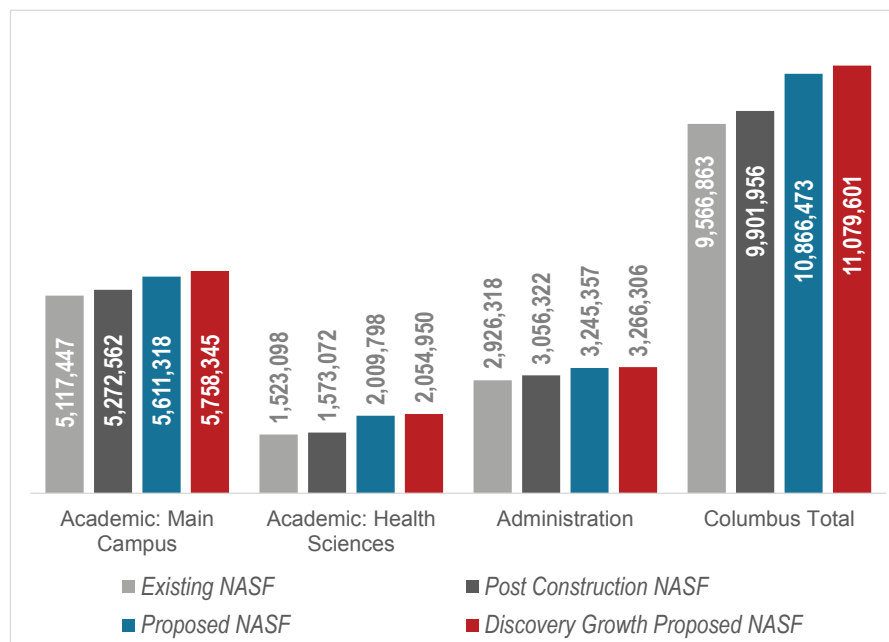
Space Needs Assessment by Space Category

	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic + Research Space								
Classrooms	533,871	670,183	(136,312)	529,476	670,183	(140,707)	670,183	(140,707)
Instructional Labs	849,742	1,017,402	(167,660)	874,326	1,017,402	(143,076)	1,017,402	(143,076)
<i>Class Laboratories</i>	467,556	645,046	(177,490)	505,738	645,046	(139,308)	645,046	(139,308)
<i>Open Laboratories</i>	382,186	372,356	9,830	368,588	372,356	(3,768)	372,356	(3,768)
Research Labs	1,360,289	1,498,414	(138,125)	1,448,681	1,498,414	(49,733)	1,637,950	(189,269)
Academic + Research Offices	2,461,334	2,585,560	(124,226)	2,502,258	2,585,560	(83,302)	2,628,795	(126,537)
Library + Study Space	477,015	622,053	(145,038)	479,851	622,053	(142,202)	622,053	(142,202)
Other Academic Space	460,158	501,263	(41,105)	469,689	501,263	(31,574)	501,263	(31,574)
Clinic Space	131,412	203,090	(71,678)	177,166	203,090	(25,924)	203,090	(25,924)
Vivaria	117,933	129,231	(11,298)	114,140	129,231	(15,091)	140,139	(25,999)
Academic + Research Space Total	6,391,754	7,227,196	(835,442)	6,595,587	7,227,196	(631,609)	7,420,875	(825,288)
Support Space								
Administrative Offices	700,214	626,255	73,959	723,446	626,255	97,191	626,255	97,191
Other Administrative Space	163,818	171,754	(7,936)	161,456	171,754	(10,298)	171,754	(10,298)
Assembly + Exhibit Space	109,891	207,378	(97,487)	110,871	207,378	(96,507)	207,378	(96,507)
Conference/Event Center	514,855	514,855	0	514,855	514,855	0	514,855	0
Athletic Space	736,012	900,000	(163,988)	846,123	900,000	(53,877)	900,000	(53,877)
Physical Plant	285,864	377,681	(91,817)	284,887	387,398	(102,511)	406,847	(121,960)
Support Space Total	2,510,654	2,797,923	(287,269)	2,641,638	2,807,640	(166,002)	2,827,089	(185,451)
Student Space								
Student Centered	239,067	349,932	(110,865)	239,343	349,932	(110,589)	349,932	(110,589)
Student Health	21,597	26,540	(4,943)	21,597	26,540	(4,943)	26,540	(4,943)
PE / Recreation	403,791	455,165	(51,374)	403,791	455,165	(51,374)	455,165	(51,374)
Student Space Total	664,455	831,637	(167,182)	664,731	831,637	(166,906)	831,637	(166,906)
TOTAL	9,566,863	10,856,756	(1,289,893)	9,901,956	10,866,473	(964,517)	11,079,601	(1,177,645)

- At the baseline year, classrooms represent 16% of the total academic and research needs. This additional need is due to a significant deficit in the College of Arts and Sciences.
- Class laboratories demonstrate a significant need in the baseline year. The College of Arts and Sciences and the College of Engineering generate the need on the Main Campus, and the College of Medicine has a small need on the Health Sciences Campus.
- The College of Engineering and the College of Food, Agriculture, and Environmental Sciences have a need for additional research labs. Due to the nature of their research, these disciplines require larger footprints to accommodate materials and equipment.
- In the academic and research offices category, there is a need for additional space. Academic Affairs and the College of Food, Agriculture, and Environmental Sciences have a substantial need for office space – almost 115,000 NASF combined. Other academic units have surpluses.
- Overall, administrative units have a surplus of space. This is a result of average office sizes being larger than the average metric of 140 NASF that was applied throughout the study.

- Library and study space has a need for a 30% increase in space. The need is reflected in the university Libraries unit to recognize the shortage of study space in the library and throughout the Columbus Campus. Examples of student study spaces include those areas that allow for independent, quiet study areas to collaboration spaces. The Health Sciences Campus does have a need for more study space within the library and where instructional activities take place.
- An additional 51,000 NASF is needed to meet needs in the Physical Education and recreation category. Needs are primarily driven by Student Recreation and the Military Science (ROTC) program.
- Assembly and exhibit space requires an additional 92,000 NASF – a 16% increase. The need is driven by the size and type of the institution.
- There is a need for an additional 111,000 NASF in student-centered space. The need is driven by the number of students. These are spaces that students have first priority for use. Space in this category includes: lounges; dining and food services; student government and organization space; student newspaper, television, and radio; campus bookstore; recreation such as billiards, ping pong, gaming rooms; student theatre and meeting rooms. The Health Sciences Campus demonstrated a strong need for student-centered space as they have a very minimal amount of student centered space.
- In the student health category, there is a nominal need for additional space. The need is driven by student headcount.
- In the other academic space category, there is a need for approximately 10% additional space with Military Science having the largest need. Specific examples of need include simulation space, student locker rooms, and storage.
- Other administrative space typically includes departmental meeting rooms and storage areas, employee locker rooms, and shop space. Overall, the university is in relative balance in this category.

Space Needs Assessment by Primary Unit Summary



Space Needs Assessment by Primary Unit

	2014			Future Existing NASF	Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)		Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic: Main Campus								
College of Arts and Sciences	1,623,759	1,752,333	(128,574)	1,675,326	1,752,333	(77,007)	1,794,368	(119,042)
Max M. Fisher College of Business	129,059	111,032	18,027	129,059	111,032	18,027	112,307	16,752
College of Education and Human Ecology	266,641	226,479	40,162	266,641	226,479	40,162	227,364	39,277
College of Engineering	908,813	980,666	(71,853)	1,015,721	980,666	35,055	1,039,111	(23,390)
College of Food, Agriculture, and Environmental Science	477,419	550,010	(72,591)	477,419	550,010	(72,591)	580,795	(103,376)
Moritz College of Law	134,432	120,852	13,580	134,432	120,852	13,580	121,577	12,855
John Glenn College of Public Affairs	28,617	20,199	8,418	28,617	20,199	8,418	21,084	7,533
College of Social Work	18,510	23,059	(4,549)	18,510	23,059	(4,549)	23,059	(4,549)
University Libraries	380,843	454,848	(74,005)	380,843	454,848	(74,005)	454,848	(74,005)
Academic Affairs	676,367	763,855	(87,488)	683,124	763,855	(80,731)	775,847	(92,723)
Classroom Pool	24,506	43,957	(19,451)	18,283	43,957	(25,674)	43,957	(25,674)
Classrooms	448,481	564,028	(115,547)	444,587	564,028	(119,441)	564,028	(119,441)
Academic: Main Campus Total	5,117,447	5,611,318	(493,871)	5,272,562	5,611,318	(338,756)	5,758,345	(485,783)
Academic: Health Sciences								
College of Dentistry	145,719	213,542	(67,823)	182,549	213,542	(30,993)	213,542	(30,993)
College of Medicine	721,483	998,560	(277,077)	735,128	998,560	(263,432)	1,013,160	(278,032)
College of Nursing	31,628	63,484	(31,856)	31,628	63,484	(31,856)	63,484	(31,856)
College of Optometry	63,621	65,986	(2,365)	63,621	65,986	(2,365)	65,986	(2,365)
College of Pharmacy	89,518	99,608	(10,090)	89,518	99,608	(10,090)	110,303	(20,785)
College of Public Health	31,885	36,298	(4,413)	31,885	36,298	(4,413)	42,258	(10,373)
College of Veterinary Medicine	182,020	234,545	(52,525)	182,020	234,545	(52,525)	240,690	(58,670)
Health Sciences Cores, Centers, and Institutes	171,834	191,620	(19,786)	171,834	191,620	(19,786)	199,372	(27,538)
Classrooms	85,390	106,155	(20,765)	84,889	106,155	(21,266)	106,155	(21,266)
Academic: Health Sciences Total	1,523,098	2,009,798	(486,700)	1,573,072	2,009,798	(436,726)	2,054,950	(481,878)
Administrative								
President	14,876	14,319	557	14,876	14,319	557	14,319	557
Administration and Planning	346,150	419,420	(73,270)	340,346	426,186	(85,840)	443,554	(103,208)
Advancement	133,872	132,877	995	133,872	132,877	995	132,877	995
Athletics	797,966	933,490	(135,524)	936,307	933,490	2,817	933,490	2,817
Business and Finance	190,948	183,484	7,464	190,948	186,435	4,513	188,516	2,432
Business Advancement	450,885	446,321	4,564	454,685	446,321	8,364	446,321	8,364
Government Relations	2,378	2,965	(587)	2,378	2,965	(587)	2,965	(587)
Legal Affairs	11,537	10,155	1,382	11,537	10,155	1,382	10,155	1,382
Student Life	925,357	1,019,863	(94,506)	919,024	1,019,863	(100,839)	1,021,363	(102,339)
Talent, Culture, and Human Resources	50,805	71,306	(20,501)	50,805	71,306	(20,501)	71,306	(20,501)
Board of Trustees	1,544	1,440	104	1,544	1,440	104	1,440	104
Administrative Total	2,926,318	3,235,640	(309,322)	3,056,322	3,245,357	(189,035)	3,266,306	(209,984)
TOTAL	9,566,863	10,856,756	(1,289,893)	9,901,956	10,866,473	(964,517)	11,079,601	(1,177,645)

- On the Main Campus, clinic space is in relative balance. However, the Health Sciences Campus has a need for an additional 70,000 NASF. The College of Dentistry and the College of Veterinary Medicine have the largest need.
- The Main Campus and the Health Sciences Campus have a need of 12,000 NASF additional vivaria space. The need is driven by the amount of research laboratory space proposed in the College of Medicine and the Sciences in the College of Arts and Sciences.

- Medicine has the largest need for space followed by Arts and Sciences, University Libraries, College of Food, Agriculture and Environmental Sciences, Engineering, and Dentistry.

Space Needs Assessment – Post Construction

- In the Post Construction scenario, the overall University space deficit is reduced by 25 percent. The need in Support Space is reduced by over 40 percent, and the need in Academic + Research Space is reduced by 24 percent.
- The College of Engineering, the College of Dentistry, and Athletics acquire the largest percentage increase in space as a result of FY2016 capital construction.

Space Needs Assessment - Discovery Theme Growth

- In the Discovery Themes Initiative scenario, the need in Academic and Research Space increases by over 30 percent. This essentially negates gains realized in the Post Construction scenario. Support Space has a need for 12 percent more space.
- The Colleges of Arts and Sciences, Engineering, and Food, Agriculture, and Environmental Sciences are expected to experience the largest need for additional space due to faculty growth to support the Discovery Themes Initiative.

RECOMMENDATIONS

- Provide collaboration space for problem solving and integrated research and teaching.
- Partnerships are critical for advancing and leveraging research and funding.
- Successful implementation of distance and on-line learning will enhance the profile of the university and expand the outreach potential.
- Not all space is equal; some existing buildings cannot meet the demands of today's use. Address space needs through renovation, repurposing, and new construction as appropriate.
- Improvements to space and facility condition are needed to support the mission and goals of the university. Spaces should be flexible.
- Specialized facilities should be highly utilized; consider hubs of activity and maker spaces.
- Building design decisions should be based on flexibility and function not building occupancy.
- Maintain high utilization of space.
- Plan for reasonable comparability for each college and space type.



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PROJECT OVERVIEW

The Ohio State University engaged Ayers Saint Gross to update its 2010 One Ohio State Framework Plan. The project, known as Framework 2.0, is a review to determine current and future needs to ensure the academic mission drives the physical environment. A space needs assessment was conducted to identify current space distributions, utilization, and areas of need. Fall 2014 serves as the baseline for the study with two future scenarios – space needs post construction and space needs for the Discovery Themes Initiative.

INTRODUCTION

A space assessment is a way to tell a university's physical space story in numbers. As part of the process, the base data used was audited and challenged. This was done to avoid false outcomes. The assessment reflects net assignable square feet (NASF). This square footage counts the space from inside wall to inside wall that can be assigned to a particular space category and unit or department. The space must also be conditioned space which then excludes loading docks that are open to the outside and unconditioned storage sheds like storage containers. Public corridors, public restrooms, stair wells, electrical and janitorial closets, mechanical spaces, and building structural elements are not included as net assignable square footage.

The needs reflected in the space needs assessment are not absolutes nor are they space entitlements.

Absolute means that a program or unit and the space they use might be mismatched. For example, a unit may show a need for class laboratory space like a computer lab. The existing space might reflect that they do not have an existing computer lab. However, they satisfy this computer lab need with a computer lab that is under the central purview of the information technology unit or the Office of Academic Affairs.

For The Ohio State University, the space metrics applied are based upon Ohio State space guidelines, widely used guidelines, benchmarking, and the consultant's experience. The metrics are applied by space category. For classrooms and class laboratories, the course data is used, and the laboratory metrics vary by discipline. For office needs and research laboratory needs, the employee database is used. Library and study space needs use library collections and student counts. Assembly and exhibit space uses core space requirements with additions based on the character of the institution. Physical plant uses a percentage of existing space and proposed space recommendations. All other space categories use the number of students. The details of the methodology are in the Space Metrics section of this report.

Many of the tables found in this report compare the existing NASF to the proposed NASF generated by the space metric. The future existing NASF column reflects the space holdings of Ohio State after planned and funded new construction and renovations projects are completed. There is a set of comparative columns for Fall 2014 (baseline year) and two future scenarios modeling needs post construction and planned growth as a result of the Discovery Themes Initiative.

In addition to this report and its appendices, the consultant team used a proprietary web-based software SAMi™ to host many of the tables, statistical reports, and data visualizations for this entire assessment. SAMi™ stands for Space Analytics and Modeling interactive data visualization. University project leadership has access to this website.

DATA COLLECTION

The data required for this analysis is extensive. Building data with facilities condition and a room-by-room inventory file are necessary along with floor plans to understand space holdings. Course data is used to understand utilization of existing instructional spaces as well as to determine how much instructional space is needed. Employee data for full-time and part-time faculty and staff is needed to determine how much office space is needed. The number of tenured/tenure-track (T/TT) faculty and research faculty is derived from the employee file to help determine how much research space is needed. Additionally, research expenditures are used to aide in the determination of which units are research generating and how productive the unit is being. Finally, organizational charts, department names, and coding systems were collected. A significant amount of time from both the consultant team, the Ohio State working group, and select units was spent to verify and interpret the data received.

WORK SESSIONS AND FACILITY TOURS

The consultant team held on-campus work sessions with Planning and Real Estate (PARE) staff and the Framework 2.0 Space Committee in addition to a series of work sessions with key University stakeholders who represented the 15 Colleges, support units, student life, and athletics. There were about 30 meetings held over the course of about two weeks with over 100 participants. Issues surrounding instructional space, the research Discovery Themes, and office space were topics of intense discussion.





Questions concerning provided data was the subject of many subsequent conference calls. The team worked through the data with the university participants of these calls so that a good comfort level was achieved. The issues typically surrounded how the data was classified and interpreted and then how the data was going to be used in the assessment. Adjustments were made to the data as appropriate based on these calls and the work sessions. The team also toured a variety of buildings in order to have a more intimate knowledge of the campuses.

FALL 2014 SNAPSHOT IN TIME

Main Campus

Fall 2014

	Headcount	FTE
Undergraduate	43,296	40,963
Graduate	9,230	7,066
Professionals	554	553
Total	53,080	48,582

Columbus Campus

Fall 2014

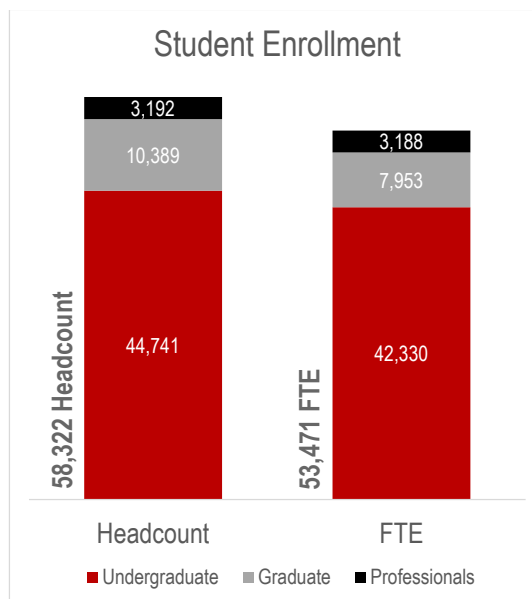
	Headcount	FTE
Undergraduate	44,741	42,330
Graduate	10,389	7,953
Professionals	3,192	3,188
Total	58,322	53,471

Health Sciences Campus

Fall 2014

	Headcount	FTE
Undergraduate	1,445	1,367
Graduate	1,159	887
Professionals	2,638	2,635
Total	5,242	4,889

Student Enrollment



RESEARCH AT A GLANCE

\$500M
Total Research
Expenditures

\$1.36M
in Research Labs

ON AVERAGE
469
NASF per T/TT Faculty

\$218K
per T/TT Faculty

BASELINE AND ASSUMPTIONS

The Framework 2.0 space needs assessment addresses Ohio State's current space needs and provides a comparative view of needs after current construction and renovations are completed and then additional space needs generated by the Discovery Themes Initiative.

ENROLLMENTS

The space needs assessment assumed enrollment would remain consistent with approximately 53,500 students between the Main Campus and the Health Sciences Campus. The headcount projection was converted to full-time equivalent (FTE) as FTE is typically the standard when applying space metrics.

EMPLOYEES

The employee growth reflected in the analysis represents those new positions anticipated as a result of the Discovery Themes Initiative. The university plans to add 225 new positions – 168 net new faculty members, 25 professional staff members, and 32 support staff members. (Note: Retiring faculty are accounted for in the “net new” number.)

FACILITIES

The existing NASF column in many of the tables in this report reflects the space that was in use for Fall 2014, which represents 482 buildings located on the Main Campus and the Health Sciences Campus.

The Ohio State University has a total of 19.4 million NASF, of which 9.6 million NASF was addressed in the space needs assessment. Hospital space including the veterinary medical center, housing, farms, and non-academic airport space were excluded from the study as well as parking garages, bus shelters and non-institutional agency space.

POST CONSTRUCTION + DISCOVERY THEMES INITIATIVE

The existing NASF column in many of the tables in this report reflects the space that was in actual usage for Fall 2014. Two scenarios were analyzed as part of the assessment. Fall 2014 need was compared to the NASF that will exist after funded construction projects are complete and the NASF impact of the Discovery Themes Initiative. Neither scenario accounts for an increase in student enrollment.

POST-CONSTRUCTION FACILITIES

The post-construction scenario includes buildings that are funded or approved for renovation or new construction. These include:

- Pomerene Hall Renovation
- Oxley Hall Renovation
- Jameson Crane Sports Medicine Institute
- Covelli Multi-Sport Arena
- Student Athlete Development Center
- Schottenstein Concourse Renovation + New Offices
- Koffolt + Fontana Laboratories Renovations
- Postle Hall Replacement – Phase I

DISCOVERY THEMES INITIATIVE ASSUMPTIONS

The Discovery Themes scenario includes growth expectations set by the Office of Academic Affairs. The faculty projections account for retiring faculty and are net new faculty. New employee hires include:

- 168 faculty
- 25 professional/non-faculty staff
- 32 support staff

Space Needed to Accommodate Discovery Theme Growth

168 New Faculty

Total NASF Needed	
<i>Research Space</i>	<i>129,200</i>
<i>Research Core Space</i>	<i>10,336</i>
Total Research Space	139,536
Vivaria Space	10,908
Office Space	43,235
Physical Plant	7,747
TOTAL	201,426

Details on the allocation of the proposed faculty are located in the tables on the following page. The distribution of faculty was supplied by the Office of the Provost. Applying the space metrics for each unit (taking into consideration the percent of faculty requiring lab space) leads to the proposed NASF.

Potential Discovery Theme Faculty Growth

	Allocation of 168 New Faculty	Percent of New Faculty Requiring Lab	Number of New Faculty Requiring Lab (rounded up)	Space Metric	Space Metric NASF	Total Proposed NASF for New Faculty
Main Campus						
CAS - Sciences	12	100%	12	Double Module; 100% Svc	1,280	15,360
CAS - Mathematics	22	100%	22	Half Module; 0% Svc	160	3,520
CAS - Social + Behavioral Sciences	25	40%	10	Single Module; 100% Svc*	640	6,400
CAS - Arts + Humanities	5	100%	5	Quarter Module; 0% Svc	80	400
CAS Total	64		49			25,680
COB	4	100%	4	Quarter Module; 0% Svc	80	320
CEHE	2	100%	2	Half Module; 0% Svc	160	320
COE	38	100%	38	Double Module; 100% Svc*	1,280	48,640
CFAES	20	100%	20	Double Module; 100% Svc*	1,280	25,600
COL	2	100%	2	Quarter Module; 0% Svc	80	160
CPA	2	100%	2	Half Module; 0% Svc	160	320
Main Campus Total	132		117			101,040
Health Sciences Campus						
COM	12	100%	12	Double Module; 50% Svc	960	11,520
COP	7	100%	7	Double Module; 100% Svc	1,280	8,960
COPH	12	100%	12	3/4 Module; No Svc	240	2,880
COVM	5	100%	5	Double Module; 50% Svc	960	4,800
Health Sciences Total	36		36			28,160
OSU TOTAL	168		153			129,200

Vivaria Space Metric Application

Fall 2014 Assessment					Potential Discovery Theme Growth				
	Total Proposed Research NASF	Total Research Space for Units Requiring Vivaria Space	Total Proposed Core Space	Total Proposed Research Space for Vivaria	Additional Research Space Needed for Discovery Theme Growth	Percent and Total of Research Space for Units requiring Vivaria Space	Plus Additional Proposed Core Space	Total Proposed Research Space for Vivaria	
Main Campus ex. Exec VP & Provost	891,594	331,461	26,835	358,296	101,040	37%	37,563	40,147	
Health Sciences Campus ex. SVP for Health Sciences	477,160	420,580	82,665	503,245	28,160	88%	24,821	32,573	
TOTAL	1,368,754	752,041	109,500	861,541	129,200		62,384	72,720	
Vivaria Space Factor				15%	Vivaria Space Factor				15%
Total Proposed Vivaria Space				129,231	Total Additional Vivaria Space to Support Growth				10,908
Total Vivaria Space Needed for Discovery Theme Scenario								140,139	

Research Core Space Metric Application

Fall 2014 Assessment					Potential Discovery Theme Growth		
	Total Proposed Research NASF	Existing Core Space	Percent and Total of Proposed Core Space minus Existing Core Space	Total Proposed Core Space	Additional Research Space Needed	Additional Core Space Needed	Total Core Space Needed for Discovery Theme Scenario
Main Campus ex. Exec VP & Provost	891,594	15,814	25%	11,021	26,835	101,040	2,584
Health Sciences Campus ex. SVP for Health Sciences	477,160	49,602	75%	33,063	82,665	28,160	7,752
TOTAL	1,368,754	65,416		44,084	109,500	129,200	10,336
Core Space Factor		8%	8%				
Total Proposed Core Space		109,500	10,336				
Proposed Core minus Existing Core Space		44,084					

This map illustrates the layout of the Ohio State University campus. It features a grid of streets with major thoroughfares like W Lane Ave, W Woodruff Ave, and W 18th Ave. Key landmarks include The Oval, South Oval, and various academic and administrative buildings. The map also shows green spaces, parks, and recreational areas. Buildings are color-coded to represent different functional groups: red for academic buildings, green for administrative buildings, yellow for student housing, and blue for athletic facilities. The map is oriented with North at the top, and the Ohio River is visible on the left side.

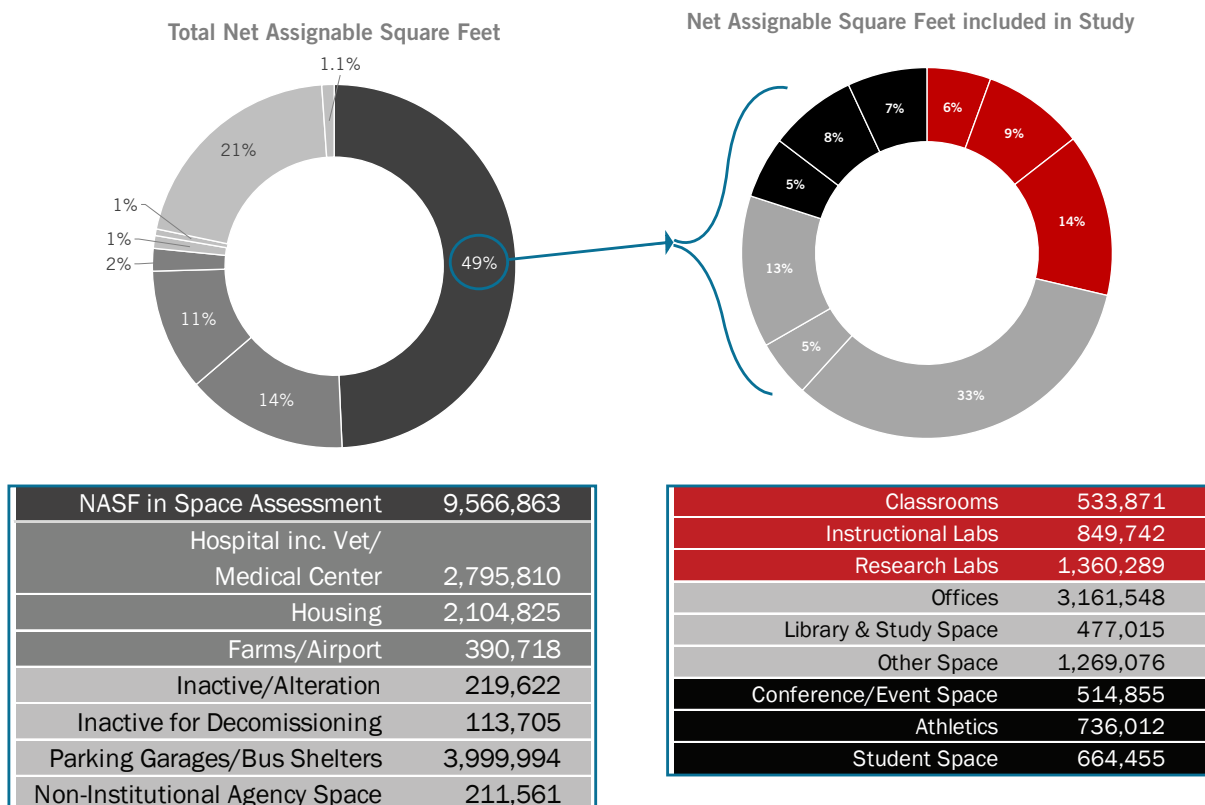
EXISTING SPACE DISTRIBUTION AND QUALITY

Ohio State has a total of 19.4 million NASF. About 14% of the space portfolio is hospital or veterinary medical space with another 11% in residential space. Twenty-one percent (21%) is parking garages and bus shelters. The space needs assessment addresses the remaining 9.6 million NASF of space, which is about 49% of its total space.

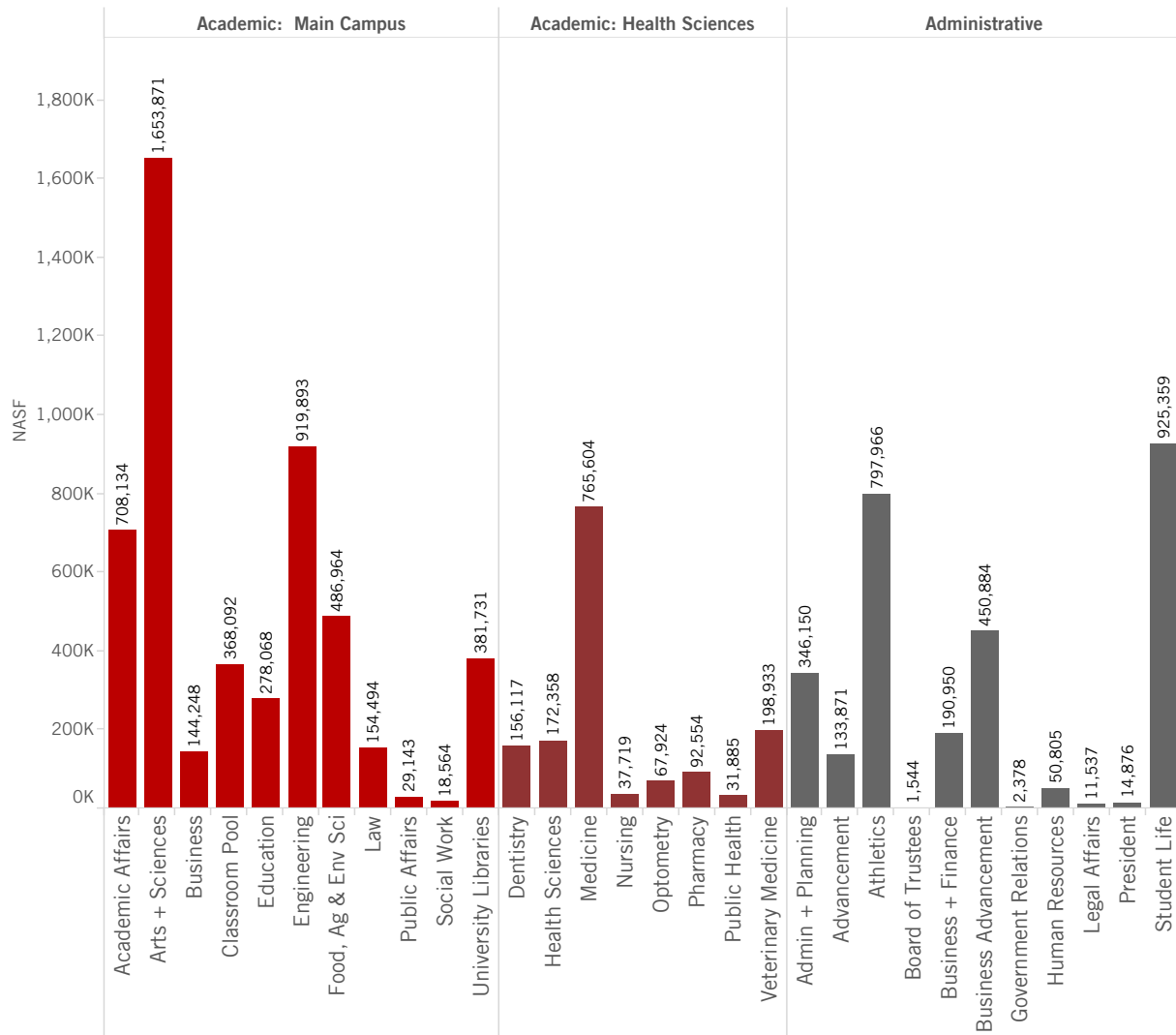
SPACE DISTRIBUTION

The existing space distribution illustrates that there is more office space than usual compared to other universities. The amount of research space and library and study space is a lower proportion than typical. Office space represents 33% of the distribution with instructional representing 15% and research space representing 14%. The space per full-time equivalent (FTE) student is 179 NASF which is slightly on the low end of the range for an institution like Ohio State.

The space studied excludes Hospital space including the veterinary medical center, housing, farms, and non-academic airport space were excluded from the study as well as parking garages, bus shelters, and non-institutional agency space.



Existing Space Distribution by Primary Unit



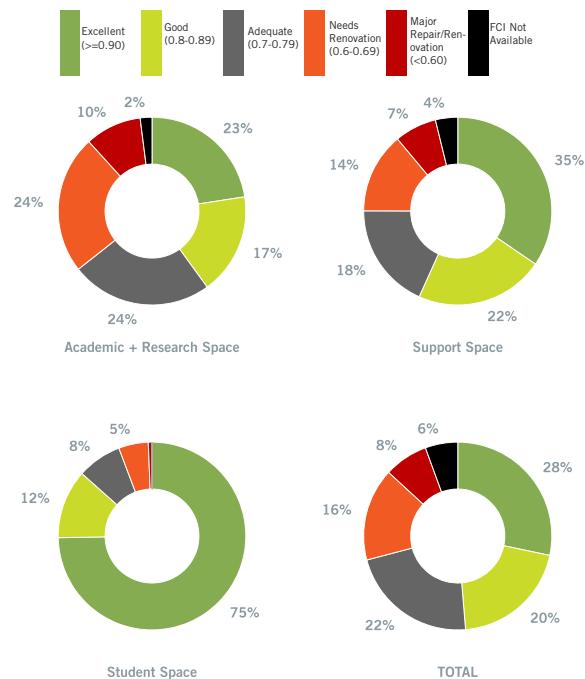
QUALITY OF SPACE

The building quality of space is an important component to understanding the overall space needs at the university. Often when the current allocation of space is inadequate for the functional needs, there is a perceived need for additional square footage. The university provided a facility condition index (FCI) for every building, which reflects a composite score based on architectural, mechanical, electrical, and plumbing systems. The FCI is then applied to the different space types contained within the building. This FCI provides a qualitative overlay in order to better understand condition of existing space and identify opportunities to meet needs within existing footprints.

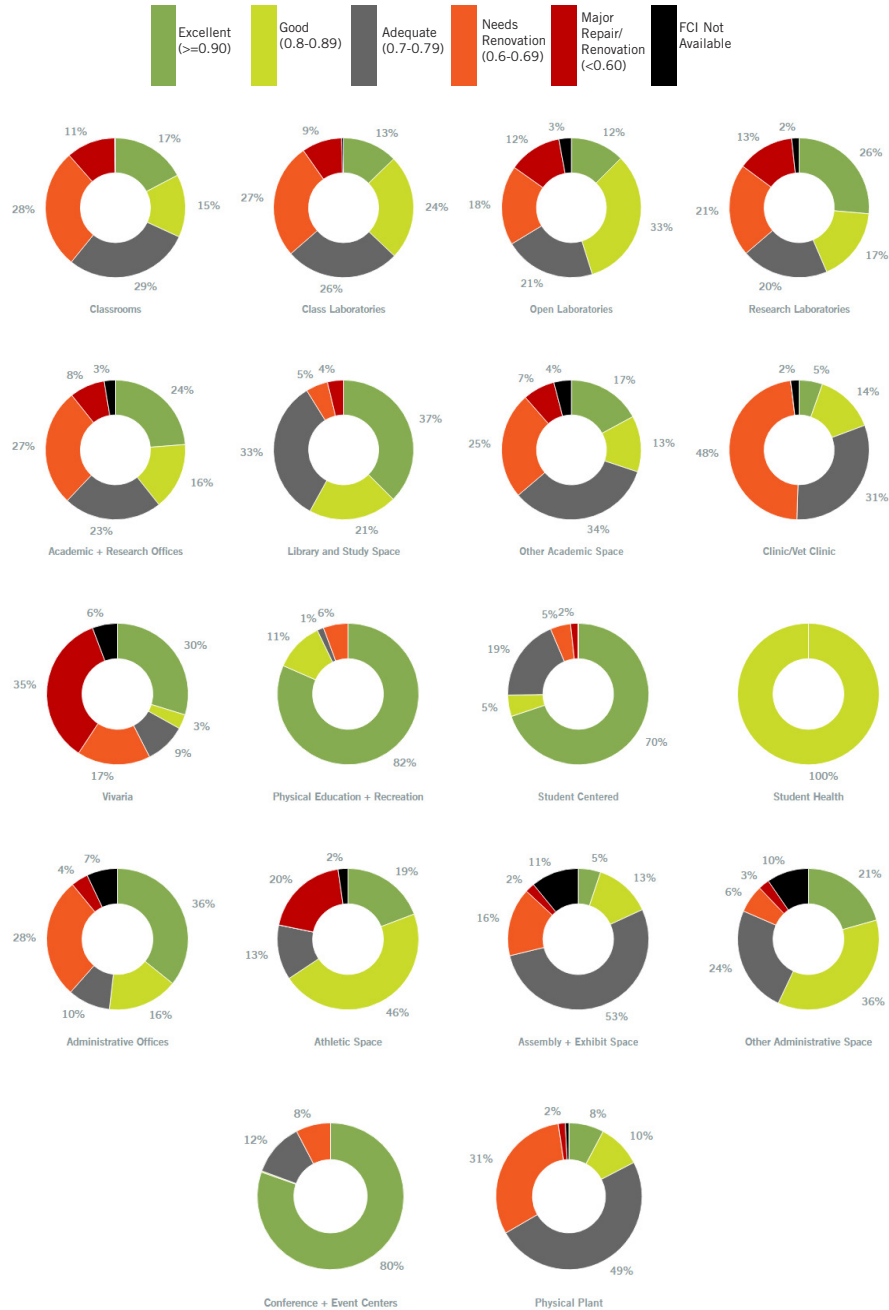
Overall, 30% of the university's building inventory has an FCI of less than 70 percent. Instructional space, research labs, and other academic space represent the largest areas of renovation need. Among the academic units on the Main Campus, the general-purpose classrooms have the largest proportion of space that is in need of renovation. The College of Engineering and the College of Food, Agriculture, + Environmental Sciences also have a significant amount of space with this condition rating.

On the Health Sciences Campus, the College of Dentistry and the College of Pharmacy have the majority of their space in buildings in need of renovation. The administrative unit with a large quantity of space in buildings in need of renovation is Administration and Planning.

Summary of Building Quality of Space



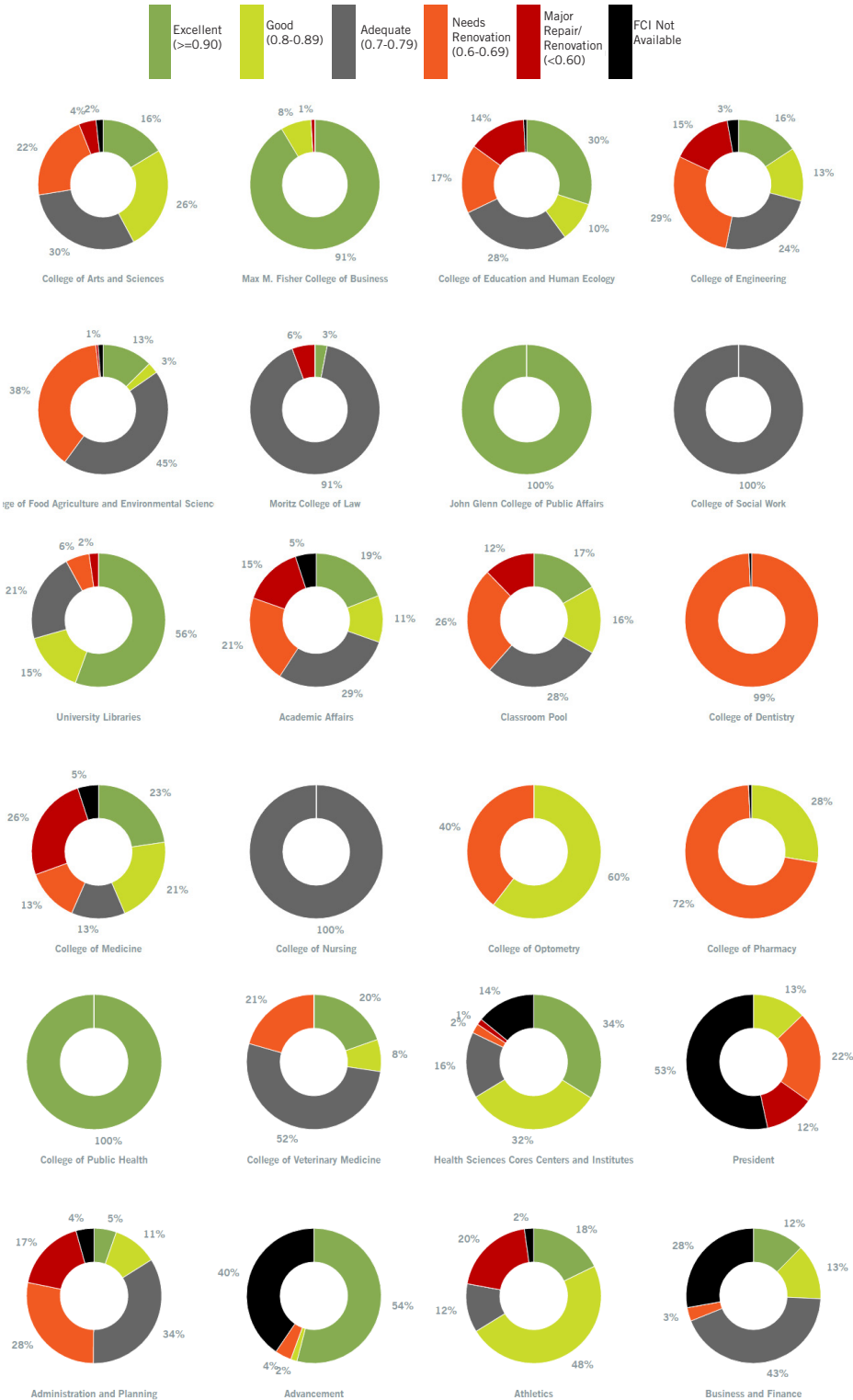
Building Quality of Space by Space Category

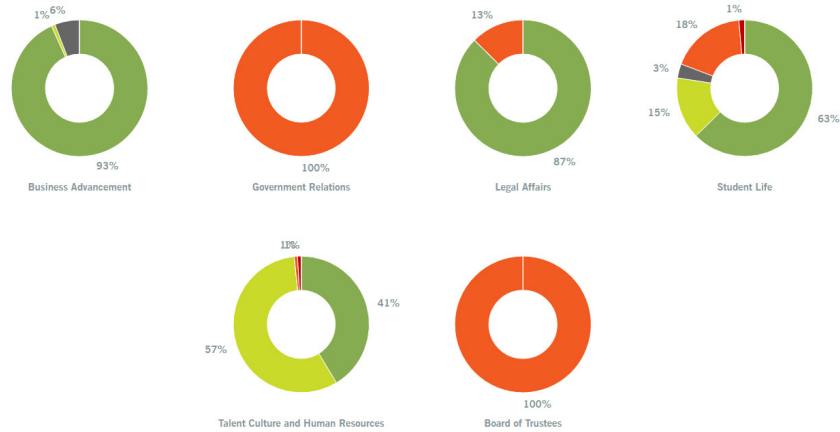


Building Quality of Space by Space Category

	Excellent (≥0.90)	Good (0.80-0.89)	Adequate (0.70-0.79)	Needs Renovation (0.60-0.69)	Major Repair/ Renovation (<0.60)	FCI Not Available	TOTAL	Percent that is Below Average + Poor
Academic Space								
Classrooms	92,357	77,725	154,721	147,784	60,420	863	533,870	57%
Class Laboratories	59,213	114,329	123,688	124,864	43,363	2,099	467,555	53%
Open Laboratories	47,714	124,920	80,848	70,575	47,094	11,036	382,187	40%
Research Laboratories	358,834	233,699	273,873	291,721	178,626	23,537	1,360,290	42%
Academic + Research Offices	584,885	383,317	559,702	670,209	199,371	63,848	2,461,333	50%
Library and Study Space	178,813	97,811	158,350	24,310	17,732	0	477,015	38%
Other Academic Space	78,691	59,840	154,919	113,982	34,083	18,640	460,155	58%
Clinic/Vet Clinic	7,100	18,226	41,061	62,482	0	2,540	131,409	79%
Vivaria	35,119	3,912	11,078	19,770	41,293	6,761	117,933	26%
Subtotal	1,442,725	1,113,780	1,558,239	1,525,697	621,982	129,325	6,391,748	48%
Support Space								
Administrative Offices	250,576	112,319	67,790	192,889	27,402	49,236	700,212	37%
Physical Education + Recreation	329,382	45,576	6,024	22,808	0	0	403,790	7%
Athletic Space	141,455	341,719	92,645	0	143,531	16,664	736,013	13%
Assembly + Exhibit Space	5,660	14,283	58,329	17,210	2,387	12,022	109,891	69%
Other Administrative Space	33,818	59,586	40,131	10,461	4,117	15,704	163,817	31%
Conference + Event Centers	413,704	1,394	60,245	39,512	0	0	514,855	19%
Physical Plant	22,218	27,511	140,813	88,623	4,437	2,265	285,866	80%
Subtotal	1,196,812	602,388	465,978	371,502	181,874	95,890	2,914,444	29%
Student Space								
Student Centered	167,040	11,702	44,981	11,159	4,186	0	239,068	23%
Student Health	0	21,598	0	0	0	0	21,598	0%
Subtotal	167,040	33,299	44,981	11,159	4,186	0	260,666	22%
TOTAL	2,806,578	1,749,467	2,069,199	1,908,358	808,042	225,215	9,566,858	52%

Building Quality of Space by Primary Unit





Building Quality of Space by Primary Unit

	Excellent (≥0.90)	Good (0.80-0.89)	Adequate (0.70-0.79)	Needs Renovation (0.60-0.69)	Major Repair/ Renovation (<0.60)	FCI Not Available	TOTAL	Percent that is Below Average + Poor
Academic: Main Campus								
College of Arts and Sciences	270,583	431,721	496,476	356,458	69,574	29,059	1,653,871	26%
Max M. Fisher College of Business	131,870	11,023	0	0	1,355	0	144,248	1%
College of Dentistry	0	0	0	155,027	0	1,090	156,117	99%
College of Education and Human Ecology	88,817	13,751	82,592	50,420	40,260	2,229	278,068	33%
College of Engineering	179,837	153,086	119,823	285,011	150,264	31,873	919,893	47%
College of Food, Agriculture, and Environmental Sciences	74,490	10,337	186,565	213,447	0	2,126	486,964	44%
Moritz College of Law	0	0	145,425	0	9,068	0	154,494	6%
College of Medicine	175,414	165,149	105,315	104,227	176,153	39,346	765,604	37%
College of Nursing	0	0	37,719	0	0	0	37,719	0%
College of Optometry	0	41,017	0	26,907	0	0	67,924	40%
College of Pharmacy	0	25,555	0	66,300	0	698	92,554	72%
John Glenn College of Public Affairs	29,143	0	0	0	0	0	29,143	0%
College of Public Health	31,885	0	0	0	0	0	31,885	0%
College of Social Work	0	0	18,564	0	0	0	18,564	0%
College of Veterinary Medicine	52,707	5,980	84,849	55,396	0	0	198,933	28%
University Libraries	212,273	57,070	81,902	21,907	8,579	0	381,731	8%
Academic Affairs	130,417	77,517	197,032	145,112	99,725	32,574	682,377	36%
Health Sciences Cores, Centers, and Institutes	56,421	66,097	8,388	14,868	24,231	2,352	172,358	23%
Classroom Pool	61,654	60,401	104,525	96,354	45,159	0	368,092	38%
Subtotal	1,495,511	1,118,702	1,669,175	1,591,434	624,369	141,347	6,640,538	33%
Administrative								
President	0	1,917	0	3,262	1,756	7,941	14,876	34%
Administration and Planning	30,815	39,602	134,449	128,530	9,264	3,491	346,150	40%
Advancement	73,073	753	0	5,351	0	54,694	133,871	4%
Athletics	142,727	384,318	93,538	0	159,737	17,646	797,966	20%
Business and Finance	32,781	35,128	114,416	8,626	0	0	190,950	5%
Business Advancement	420,369	3,933	26,582	0	0	0	450,884	0%
Government Relations	0	0	0	2,378	0	0	2,378	100%
Legal Affairs	10,084	0	0	1,453	0	0	11,537	13%
Student Life	580,211	136,164	31,039	165,376	12,473	96	925,359	19%
Talent, Culture, and Human Resources	21,008	28,949	0	405	443	0	50,805	2%
Board of Trustees	0	0	0	1,544	0	0	1,544	100%
Subtotal	1,311,067	630,764	400,024	316,923	183,673	83,868	2,926,320	17%
TOTAL	2,806,578	1,749,467	2,069,199	1,908,358	808,042	225,215	9,566,858	50%



UTILIZATION

On Ohio State's Main Campus, there are 438 classrooms that are scheduled on average 27 hours per week with an average seat fill rate of 63% equating to about 21.6 week seat hours. Across the Main Campus classrooms, the average NASF per seat is 20 NASF, which limits pedagogy flexibility. The Main Campus has 238 class laboratories averaging 21 hours per week of scheduled use with a 68% seat fill rate. There was limited documentation of the Health Sciences classrooms and class laboratories; therefore, for the Utilization Study these rooms were excluded.

UTILIZATION MATHEMATICS

Utilization of classrooms is determined through the combined analysis of course and room inventory data. Scheduled use of classrooms is analyzed by day and time of day as well as through average weekly room hour use, average student seat fill percentage, and weekly seat hours. The analysis is built room-by-room and then averaged based upon a group of rooms so that the average is weighted. The groupings could represent a variety of themes but usually includes a summary by building, seat capacity range, primary occupant, and by classroom type.

Weekly room hours are determined by the number of days a course meets multiplied by the class duration in hours. The weekly room hours are then multiplied by the number of students enrolled in the course to determine the weekly student contact hours. The weekly student contact hour capacity is determined by the number of student seats in the room multiplied by the weekly room hours. The percent of seats filled is determined by dividing the weekly student contact hours by the weekly student contact hour capacity. The weekly student contact hours are then divided by the number of student seats in the room to determine weekly seat hours.

To determine a room's seat fill percentage, the weekly student contact hours are totaled for the room as well as the weekly student contact hour capacity and these two sums are then divided for a weighted average. Likewise, to determine the weekly seat hour average for a room, the weekly student contact hours are totaled for the room and then divided by the number of student seats for the room. The best way to analyze utilization for classrooms is to look at the weekly seat hours as this combines the two rates – weekly room hours and seat fill percentage.

$$WRH = \left(\frac{\text{NUMBER OF DAYS}}{\text{OF DAYS}} \right) \times \left(\frac{\text{CLASS DURATION}}{\text{IN HOURS}} \right)$$

$$WSCH = \left(\frac{\text{NUMBER OF STUDENTS}}{\text{OF STUDENTS}} \right) \times WRH$$

$$WSCH \text{ CAPACITY} = \left(\frac{\text{NUMBER OF STUDENT SEATS}}{\text{STUDENT SEATS}} \right) \times WRH$$

$$\% \text{ SEATS FILLED} = \frac{WSCH}{WSCH \text{ CAPACITY}}$$

$$\text{WEEKLY SEAT HOURS} = \frac{WSCH}{\text{NUMBER OF STUDENT SEATS}}$$

WRH = WEEKLY ROOM HOURS (*alternatively titled weekly contact hours*)

WSCH = WEEKLY STUDENT CONTACT HOURS

CLASSROOMS

It is important to define classroom spaces correctly as not all spaces can be regularly scheduled and accessed. Primary function is key to classifying and identifying space on campus. The term “classroom” includes not only general-purpose classrooms but also: departmentally held classrooms, lecture halls, recitation rooms, seminar rooms and other spaces used primarily for scheduled non-laboratory instruction. Various types of instructional aids or equipment and multimedia technology may be contained within a classroom space as long as such aids, equipment, or technology does not restrict the room to the instruction of a specific subject or discipline.

For this study, it was determined that the Main Campus has 438 classroom spaces and the Health Sciences Campus has 82 classrooms. There was not enough data documenting the scheduled use of the

Health Sciences classrooms; therefore, these rooms are excluded from the utilization study. On the Health Sciences campus eleven of the 82 rooms are general classroom pool classrooms. These rooms are scheduled heavier than the classroom pool rooms on the Main Campus at 32 hours per week with a 70% seat fill rate for 23.4 weekly seat hours.

National Classroom Utilization Trends

Scheduled Expectations of States and Systems	Weekly Room Hours	Percent of Seats Filled	Weekly Seat Hours
Average of Expectations	35	64%	n/a
Median	32	65%	20.8
Most Used Expectation	30	60%	18.0
Today's Trends	35-40	70-75%	24-30
Target for Study	35	70%	24.5
OSU's Average	27	63%	21.6

On the Main Campus, there are 438 classrooms that are scheduled on average 27 hours per week with an average seat fill rate of 63% equating to about 21.6 week seat hours. These utilization averages are moderately low compared to today's trends and national averages of those states or systems which have utilization expectations. Of the 438 classrooms, 338 rooms are general-purpose classrooms, and 100 rooms are

departmental classrooms. The general-purpose classrooms were scheduled more efficiently in that the weekly seat hours averaged more than two times the seat average of the departmental classrooms. Across the Main Campus classrooms, the average NASF per seat is 20 NASF, which limits the pedagogy flexibility. Modern-day instructional spaces typically have 25 NASF as a minimum.

One of the issues that impede the ability to have higher utilization rates is block scheduling on Mondays and Wednesdays (MW) rather than the traditional 50 minute sections of Mondays, Wednesdays, and Fridays (MWF). Problem based learning promotes the need for longer meeting sessions over traditional 50 minute sessions. However when there is a combination of MW and MWF scheduling the ability to achieve higher utilization rates becomes difficult. The combination of these scheduling patterns work best if the registrar has scheduling policies in place and has done a strategic mapping of specific classrooms for the different scheduling patterns. The combination of these two strategies minimizes the amount of downtime for a classroom while accommodating different scheduling patterns. In no way should the desire for increased utilization dictate pedagogy; but being aware of the impact block scheduling can have on achieving higher utilization rates with traditional scheduling patterns should be acknowledged and managed with intentional strategies.

Scheduled Use by Day and Time

This analysis reviews the number of classrooms scheduled at popular start times, Monday through Friday. Peak classroom start times is from 9:35AM to 3:00PM, Monday through Thursday. The most utilized time slot is 11:30AM for all days except Mondays. Tuesdays, Wednesdays, and Thursdays are heavily utilized between the start times of 9:35AM and 3:00PM. On all days, the 8:00AM and 8:30AM start times are used less than 50%.

A good indicator of the need for additional classroom space is if 80% of classrooms are scheduled consistently throughout the day. Overall, Ohio State is in relative balance but some time slots on Tuesday, Wednesday, and Thursday are near the 80% mark. (The 11:30AM time slot is the only period that exceeds 80%.) The graphs to illustrate this usage are on the following page. The percentage represents the number of rooms scheduled at the time divided by the total number of rooms.

Main Campus

Scheduled Classroom Use by Day and Time - Fall 2014

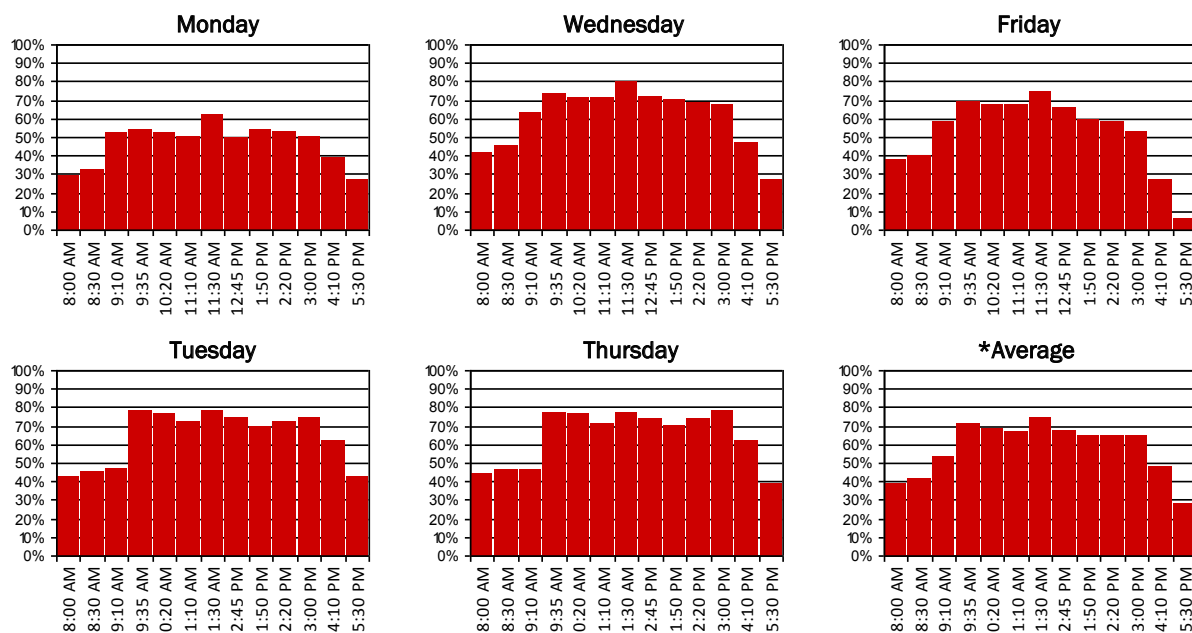
(Darker colors indicate a large percentage of rooms are scheduled.)

5:30 PM	28% 121 Rooms	43% 189 Rooms	28% 123 Rooms	40% 174 Rooms	6% 26 Rooms	29% 127 Rooms
4:10 PM	40% 174 Rooms	63% 274 Rooms	48% 209 Rooms	62% 273 Rooms	28% 121 Rooms	48% 210 Rooms
3:00 PM	50% 221 Rooms	75% 330 Rooms	68% 297 Rooms	79% 345 Rooms	53% 234 Rooms	65% 285 Rooms
2:20 PM	53% 234 Rooms	72% 315 Rooms	69% 301 Rooms	74% 324 Rooms	59% 260 Rooms	66% 287 Rooms
1:50 PM	55% 240 Rooms	70% 306 Rooms	70% 308 Rooms	70% 307 Rooms	60% 262 Rooms	65% 285 Rooms
12:45 PM	50% 218 Rooms	75% 330 Rooms	73% 318 Rooms	74% 326 Rooms	66% 289 Rooms	68% 296 Rooms
11:30 AM	62% 272 Rooms	79% 346 Rooms	81% 353 Rooms	78% 340 Rooms	75% 330 Rooms	75% 328 Rooms
11:10 AM	51% 222 Rooms	72% 317 Rooms	71% 313 Rooms	72% 314 Rooms	68% 297 Rooms	67% 293 Rooms
10:20 AM	53% 230 Rooms	76% 335 Rooms	72% 314 Rooms	76% 335 Rooms	68% 297 Rooms	69% 302 Rooms
9:35 AM	55% 239 Rooms	79% 345 Rooms	74% 326 Rooms	78% 342 Rooms	70% 305 Rooms	71% 311 Rooms
9:10 AM	53% 230 Rooms	47% 206 Rooms	63% 277 Rooms	47% 204 Rooms	59% 258 Rooms	54% 235 Rooms
8:30 AM	33% 144 Rooms	46% 200 Rooms	46% 201 Rooms	47% 204 Rooms	40% 177 Rooms	42% 185 Rooms
8:00 AM	29% 128 Rooms	43% 189 Rooms	42% 183 Rooms	45% 196 Rooms	39% 169 Rooms	39% 173 Rooms
	Monday	Tuesday	Wednesday	Thursday	Friday	*Average

Total classrooms = 438

* The average is calculated on Monday through Friday use.

Percent of Classrooms In Use



Capacity Utilization

The Capacity Utilization shows that the heaviest scheduled capacity is the 201-250 group followed by the 151-200 group where the weekly seat hour average is 30.7 hours and 28.2 hours respectively. In addition to these capacity ranges, the 81-100 group and the 251-300 group exceed the target of 24.5 weekly room hours. The capacity group with 24 or less seats is scheduled the least at 11.9 weekly seat hours.

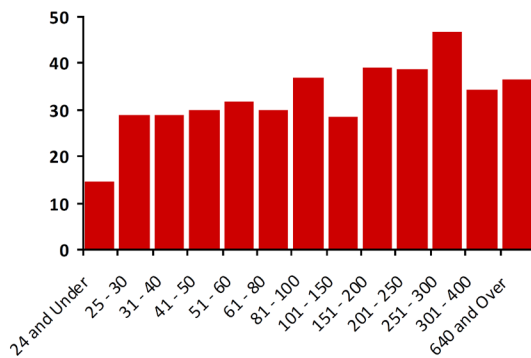
Approximately 75% of all Ohio State's classrooms have 50 or fewer seats. These 327 rooms exceed the weekly room hour target with 25.6 hours, but the seat fill rate is low at 63% as is the weekly seat hours at 17.8 hours. The average NASF per seat is 20 NASF, which is below the target of 25 NASF. These findings indicate there is capacity to absorb additional course sections, if needed.

Alternatively, Ohio State makes very good use of its high-capacity classrooms. There are 21 rooms that seat 151 or more students with a utilization rate of 38.6 weekly room hours, 67% seat fill rate, and 27.9 weekly seat hours. The average NASF per seat is 12 NASF, which is within the range of NASF per seat for large-capacity classrooms.

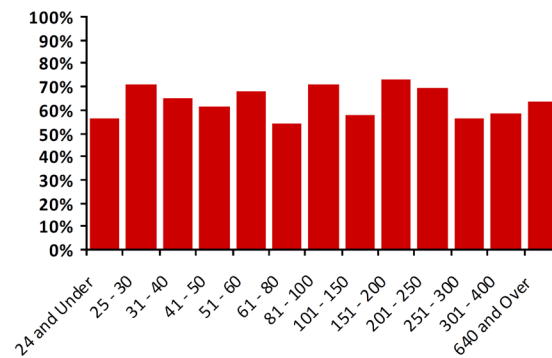
Main Campus - Classroom Utilization by Capacity - Fall 2014

Classroom Capacity	Room Characteristics				Average Utilization			
	TOTAL		AVERAGE		Course Enrollment	Weekly Room Hours	Percent of Seats Filled	Weekly Seat Hours
	No. of Rooms	No. of Seats	NASF per Room	NASF per Seat				
24 and Under	83	1,470	449	29	10	15	56%	11.9
25 - 30	65	1,812	563	20	20	29	71%	21.3
31 - 40	85	3,139	692	19	24	29	65%	20.1
41 - 50	94	4,356	850	18	28	30	61%	19.6
51 - 60	30	1,715	964	17	38	32	68%	21.9
61 - 80	27	1,919	1,259	18	38	30	54%	18.2
81 - 100	17	1,530	1,609	18	62	37	70%	25.8
101 - 150	16	2,093	1,866	14	74	28	57%	19.9
151 - 200	5	874	2,387	14	124	39	73%	28.2
201 - 250	9	2,054	2,899	13	158	39	70%	30.7
251 - 300	2	561	2,909	10	157	47	56%	26.4
301 - 400	3	1,040	4,101	12	192	34	59%	22.7
640 and Over	2	1,368	6,107	9	434	37	64%	23.2
Totals / Averages:	438	23,931	916	20	34	27	63%	21.6

Weekly Room Hours:



Seats Filled:



Main Campus - Classroom Utilization by Scheduling Type - Fall 2014

Scheduling	Room Characteristics				Average Utilization			
	TOTAL		AVERAGE		Course Enrollment	Weekly Room Hours	Percent of Seats Filled	Weekly Seat Hours
	No. of Rooms	No. of Seats	NASF per Room	NASF per Seat				
Central	338	19,034	912	19	38	30	65%	24.6
Departmental	100	4,897	929	23	22	18	56%	9.9
Totals / Averages:	438	23,931	916	20	34	27	63%	21.6

Primary Unit Utilization

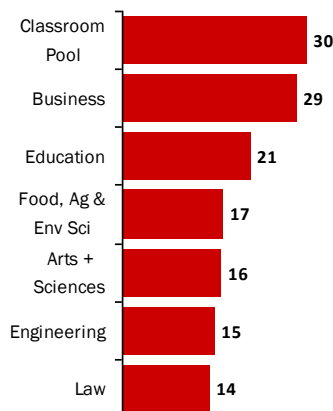
The vast majority of classrooms analyzed, 77%, are centrally scheduled through the university Registrar (organized under the Provost). As such, it is important to remember that any classrooms held by departments are likely more discipline specific and thus might not be able to be used as efficiently as the centrally scheduled classrooms. That said, the centrally scheduled classrooms are scheduled considerably more than their departmentally held counterparts. Centrally scheduled rooms averaged 30 weekly room hours at 65% seat fill for 24.6 average weekly seat hours. The College of Business and the College of Arts and Sciences had better fill rates, but weekly room hours were less.

Main Campus - Classroom Utilization by Primary Unit - Fall 2014

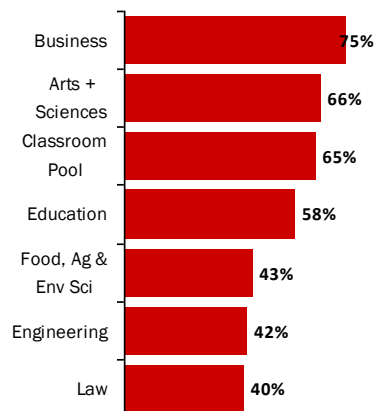
Primary Unit	Room Characteristics				Average Utilization			
	TOTAL		AVERAGE		Course Enrollment	Weekly Room Hours	Percent of Seats Filled	Weekly Seat Hours
	No. of Rooms	No. of Seats	NASF per Room	NASF per Seat				
Academic Affairs	5	178	789	25	19	12	66%	6.6
Classroom Pool	338	19,034	912	19	38	30	65%	24.6
College of Arts and Sciences	30	1,403	837	25	20	16	66%	7.8
College of Education and Human Ecology	13	500	760	22	22	21	58%	15.1
College of Engineering	14	500	740	21	13	15	42%	8.2
College of Food, Agriculture, and Environmental Sci	10	507	830	20	23	17	43%	10.4
John Glenn College of Public Affairs	1	20	526	26	7	8	40%	3.0
Max M. Fisher College of Business	11	610	1,351	25	39	29	75%	20.7
Moritz College of Law	15	1,149	1,270	19	26	14	40%	5.7
University Libraries	1	30	888	30	8	3	27%	0.9
Totals / Averages:	438	23,931	916	20	34	27	63%	21.6

*Graphs show only groupings with 6 or more rooms.

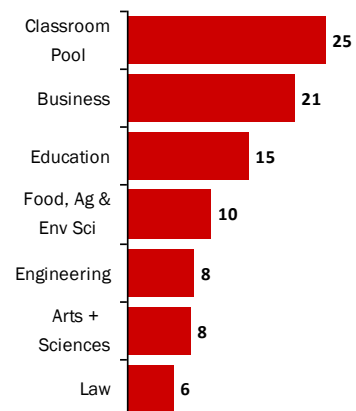
Weekly Room Hours:



Seats Filled:



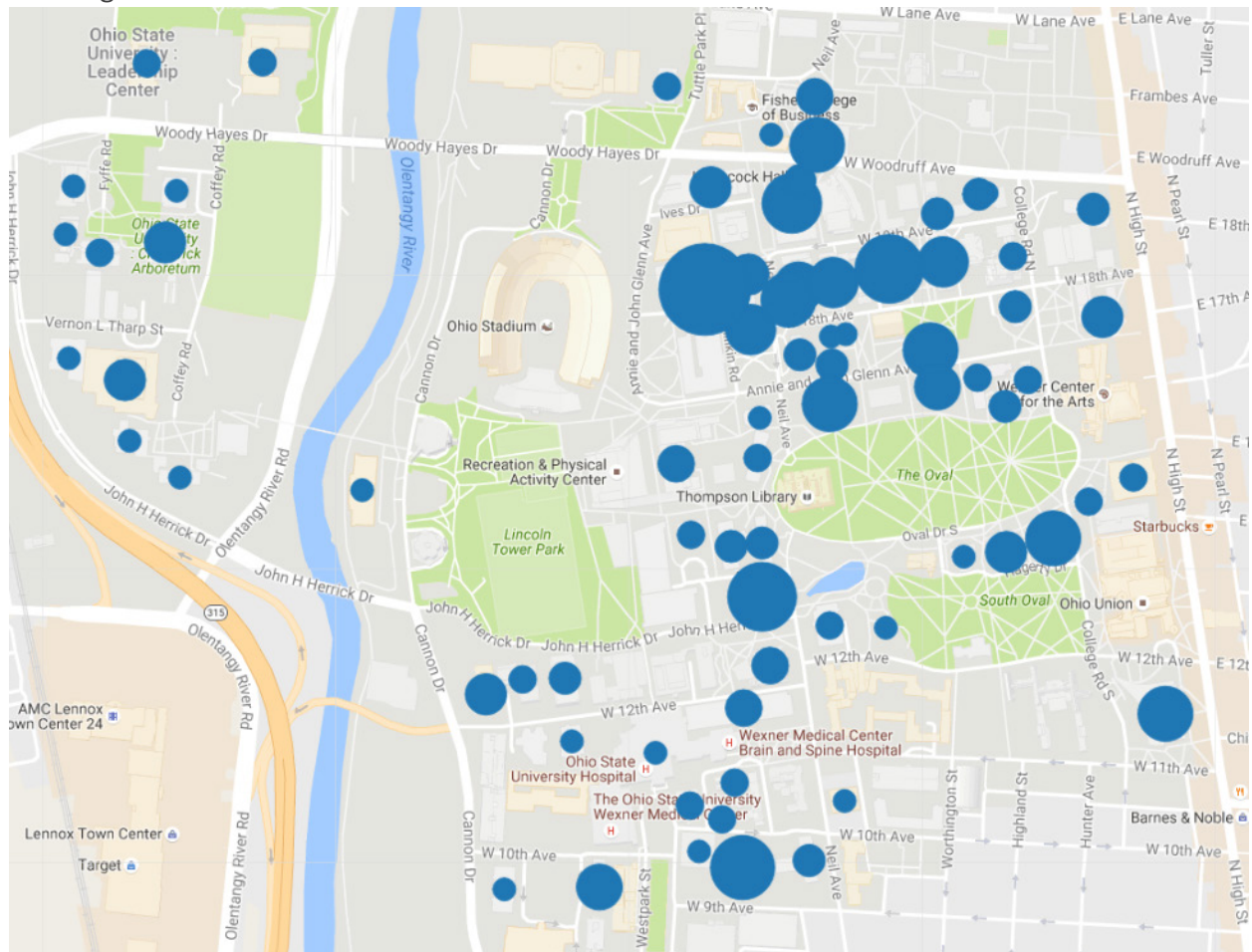
Weekly Seat Hours:



Building Utilization

There are 60 buildings on the Ohio State Main Campus that contain classrooms; however, only 16 of these buildings have 10 or more classrooms. On average, the university's classrooms are scheduled 27 hours per week at a 63% seat fill rate for a combined usage of 21.6 weekly seat hours. Schoenbaum Hall is the best utilized building with 42 weekly room hours at an 83% seat fill rate. The 16 classrooms average 22 NASF, which is lower than the 25 NASF minimum. Mason Hall, Stillman Hall, Eighteenth Avenue 209 W, and Evans Laboratory all have high weekly room hours. However, Mason Hall is the only building in which the NASF per seat exceeds the minimum target. The other buildings have extremely lower space per seat such as Eighteenth Avenue 209 W at 11 NASF. Classroom seats in Denney Hall and the Psychology Building are filled near capacity at 97% and 96% respectively.

Buildings with Classrooms



scaled by number of classrooms

Main Campus - Classroom Utilization by Building - Fall 2014

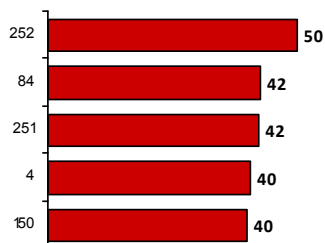
Building Name and Id		Room Characteristics				Average Utilization			
		TOTAL		AVERAGE		Course Enrollment	Weekly Room Hours	Percent of Seats Filled	Weekly Seat Hours
		No. of Rooms	No. of Seats	NASF per Room	NASF per Seat				
Agricultural Administration	003	3	136	856	20	29	20	64%	14.3
Agricultural Engineering Building	298	3	198	1,513	24	29	36	42%	15.7
Animal Science Building	156	2	107	866	16	30	26	55%	14.3
Arps Hall	011	9	357	628	18	24	26	57%	18.3
Baker Systems Engineering	280	13	523	706	17	28	27	70%	23.0
Biological Science Building	276	4	153	741	20	25	20	66%	13.4
Bolz Hall	146	17	693	674	17	27	29	67%	19.7
Caldwell Laboratory	026	13	521	674	17	26	26	64%	17.7
Campbell Hall	018	21	790	672	33	24	16	37%	23.9
CBEC	248	4	241	1,306	24	0	0	0%	0.0
Cockins Hall	063	5	255	819	17	26	26	53%	13.3
Converse Hall	056	4	154	865	27	18	12	61%	5.8
Denney Hall	030	15	417	643	29	20	28	97%	23.6
Derby Hall	025	12	357	551	20	17	22	57%	13.5
Drake Performance and Event Center	296	2	63	614	19	18	25	59%	14.5
Dreese Laboratories	279	9	572	1,024	17	43	37	68%	25.6
Drinko Hall	049	15	1,149	1,270	19	26	14	40%	5.7
Dulles Hall	337	6	184	524	16	18	31	58%	18.0
Edison Joining Technology Center	057	1	36	863	24	0	0	0%	0.0
Eighteenth Ave, 209 W	004	2	343	1,933	11	127	40	75%	31.3
Enarson Classroom	072	32	969	468	16	21	26	67%	19.5
Evans Laboratory	150	4	414	1,247	13	72	40	62%	28.7
Fontana Laboratories	151	1	40	645	16	21	28	54%	15.1
Gerlach Hall	250	7	450	1,540	25	40	30	67%	19.5
Hagerty Hall	037	15	603	765	23	30	35	74%	27.5
Hayes Hall	039	5	188	749	20	23	22	62%	13.6
Hitchcock Hall	274	5	971	1,989	13	123	33	67%	22.9
Hopkins Hall	149	4	140	901	30	27	25	74%	26.1
Howlett Hall	295	3	210	952	19	28	18	34%	11.8
Hughes Hall	042	3	498	2,212	14	36	18	27%	3.7
Independence Hall	338	1	728	7,047	10	472	36	65%	23.6
Jennings Hall	014	8	668	1,331	19	59	36	71%	28.4
Journalism Building	046	15	753	841	20	36	29	69%	22.8
Knowlton Hall	017	9	460	989	21	35	27	68%	24.5
Kottman Hall	340	9	574	1,028	20	31	19	51%	14.3
Kuhn Honors and Scholars House	959	1	24	486	20	23	15	84%	12.2
Lazenby Hall	041	5	328	1,039	17	52	29	74%	28.1
Macquigg Laboratory	265	6	370	897	15	43	30	69%	22.9
Mason Hall	252	1	45	1,509	34	33	50	74%	36.8
McPherson Chemical Lab	053	14	1,079	1,139	16	47	31	57%	24.6

Main Campus - Classroom Utilization by Building - Fall 2014

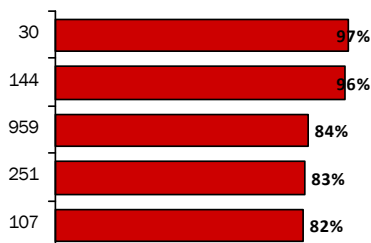
Building Name and Id		Room Characteristics				Average Utilization			
		TOTAL		AVERAGE		Course Enrollment	Weekly Room Hours	Percent of Seats Filled	Weekly Seat Hours
		No. of Rooms	No. of Seats	NASF per Room	NASF per Seat				
Mendenhall Laboratory	054	10	639	923	16	47	34	72%	24.3
Mount Hall	311	1	180	1,895	11	78	38	44%	16.5
Nineteenth Ave, 140 W	145	5	252	743	15	33	27	63%	18.1
Orton Hall	060	1	70	1,343	19	50	39	74%	29.0
Page Hall	061	4	248	1,224	21	43	28	64%	23.5
Parker Food Science and Technology	064	2	120	819	14	35	17	59%	11.2
Physical Activity and Education Services - PAES	245	8	308	935	25	21	28	59%	15.4
Plumb Hall	066	1	42	715	17	0	0	0%	0.0
Pomerene Hall	067	3	158	989	21	31	20	61%	12.5
Pressey Hall	309	1	55	719	13	22	19	39%	7.5
Psychology Building	144	5	272	1,125	23	48	29	96%	33.0
Ramseyer Hall	090	6	276	999	34	24	29	45%	19.9
Schoenbaum Hall	251	16	1,046	1,323	22	54	42	83%	37.2
Scott Laboratory	148	14	782	1,243	24	41	33	71%	27.5
Smith Laboratory	065	21	1,043	704	17	33	28	58%	25.1
Stillman Hall	084	6	393	1,106	17	43	42	58%	29.8
Sullivant Hall	106	4	377	1,496	25	60	23	61%	25.5
Townshend Hall	087	3	200	1,115	19	45	36	66%	26.7
University Hall	339	16	625	623	17	26	31	65%	23.3
Watts Hall	107	3	84	527	19	25	26	82%	21.8
Totals / Averages:		438	23,931	916	20	34	27	63%	21.6

MOST SCHEDULED BUILDINGS

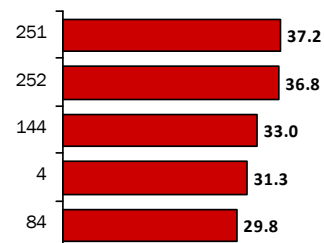
Weekly Room Hours:



Seats Filled:

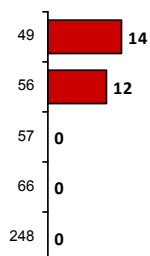


Weekly Seat Hours:

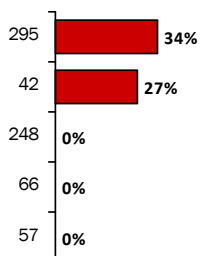


LEAST SCHEDULED BUILDINGS

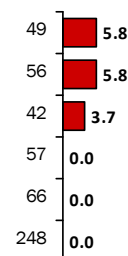
Weekly Room Hours:



Seats Filled:



Weekly Seat Hours:



CLASS LABORATORIES

What makes a laboratory a class laboratory is the regularity with which the space is scheduled. Normally, there is special equipment in the room excluding it from use as a classroom, and typically, there is minimal open access time with the exception of art studios. The room is generally not reserved for special term-long experiments or set up to accommodate student projects where students come and go as they have time. These laboratories are also not research laboratories. The NASF per Seat column reflects only the space within the laboratory itself. It does not include the class laboratory service spaces such as prep areas and storage.

Ohio State has 238 rooms classified as class laboratories. These class labs average 21 hours per week of scheduled use with a 68% seat fill rate. Art, Chemistry + Biochemistry, Physics, Music, Communication, and Life Science Education have 10 or more labs.

A commonly used utilization target is 20 weekly hours of scheduled use for class laboratories. For this project, this metric was adjusted by discipline as appropriate. Some disciplines like Arts and Engineering need to be able to leave labs and studios open for student project work. As a result, scheduled use of these labs above 20 hours per week does not allow for self-directed time.

The seat fill rate average of 68% is on the low side. Typically 80% is targeted due to high construction costs and equipment costs.

In reviewing the class laboratories utilization, a shortage of lab and studio space is evident. The use of existing space is very high for some disciplines such as Engineering, Language, Literacy, + Culture, Chemistry + Biochemistry. These units demonstrate need through greater hours of use per week and extremely high seat fill rates. This is compounded by a low NASF per student seat. This target varies by discipline with a traditional computer lab having a target of 40 NASF per seat while Engineering has a target of 200 NASF per seat. Space per student needs to increase in some disciplines in order to accommodate technology and combined lecture/lab pedagogies such as Physics. Overall, more labs and studios are needed to meet scheduling demands as well as instructional needs during and after scheduled class time.

Main Campus - Laboratory Utilization by Secondary Unit

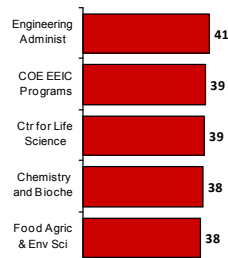
Department	Room Characteristics				Average Utilization			
	TOTAL		AVERAGE		Course Enrollment	Weekly Room Hours	Percent of Seats Filled	Weekly Seat Hours
	No. of Rooms	No. of Seats	NASF per Room	NASF per Seat				
ACEL	2	46	604	35	14	15	104%	8.0
Adv Computing Ctr/Art & Design	2	42	1,421	63	7	16	39%	6.5
Animal Sciences	5	280	3,156	49	18	15	39%	5.9
Anthropology	2	81	1,381	36	36	15	87%	12.6
Art	21	420	1,105	56	16	22	82%	17.8
Arts Admin, Education & Policy	2	93	1,487	37	23	24	57%	11.6
ASC Administration	3	56	854	47	7	6	29%	6.8
Biomedical Engineering	1	50	1,225	25	21	25	44%	10.9
Chemistry and Biochemistry	21	498	1,493	63	22	38	91%	36.1
Civil, Envir & Geod Eng	1	25	2,412	96	26	5	103%	4.6
Classroom Pool	7	248	1,629	50	30	23	86%	24.6
COE Diversity and Outreach	1	38	1,454	38	30	7	78%	5.4
COE EEIC Programs	6	276	1,717	37	39	39	80%	39.6
Computer Science & Engineering	4	202	1,405	28	44	29	90%	28.4
Consumer Sciences	1	30	653	22	18	12	86%	10.3
Ctr for Life Science Education	11	271	944	38	22	39	90%	35.6
Ctr-Language, Lit & Culture	1	7	997	142	15	21	216%	44.4
Dance	8	207	1,604	59	14	27	55%	16.2
Dept of Educational Studies	1	35	732	21	16	31	43%	13.2
Design	8	170	854	40	14	13	68%	10.0
Early Middle Childhood BSED	1	50	1,190	24	28	25	55%	13.4
Economics	1	30	891	30	0	0	0%	0.0
EEOB Evol, Ecology & Org Biology	5	144	1,171	40	17	9	62%	7.2
EHE Teaching & Learning	1	4	164	41	0	0	0%	0.0
EHE Tech & Enhanced Learning	1	20	863	43	14	12	68%	8.2
Electrical & Computer Engr.	6	123	1,309	73	13	14	56%	22.4
Engineering Administration	1	36	1,147	32	30	41	86%	34.8
English	6	114	590	43	13	10	58%	10.2
Entomology	1	10	630	63	16	19	167%	31.7
FCOB Dean/Administration	1	30	1,355	45	39	24	139%	32.7
Food Agric & Env Sci Admin	1	25	1,200	48	24	38	91%	34.2
Food Science & Technology	2	36	951	53	16	16	91%	14.4
Food, Agr & Biological Eng	6	144	2,405	140	13	23	65%	13.8
Geography	2	80	1,179	32	32	22	81%	17.2
Horticulture & Crop Science	3	52	859	50	10	9	55%	7.1
Human Nutrition	1	30	762	25	16	15	53%	7.9
Integrated Systems Engineering	2	62	4,416	146	6	8	16%	2.5
John Glenn Schl Public Affairs	1	30	1,215	41	25	31	86%	26.2
Knowlton Schl of Architecture	4	355	6,723	71	9	7	27%	2.8

Main Campus - Laboratory Utilization by Secondary Unit (continued)

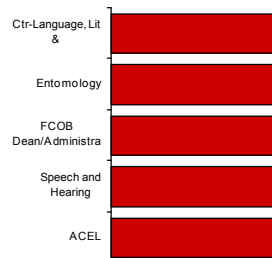
Department	Room Characteristics				Average Utilization			
	TOTAL		AVERAGE		Course Enrollment	Weekly Room Hours	Percent of Seats Filled	Weekly Seat Hours
	No. of Rooms	No. of Seats	NASF per Room	NASF per Seat				
Law Academic	1	50	1,352	27	0	0	0%	0.0
Materials Science Engineering	2	51	827	29	24	28	91%	25.1
Mechanical & Aerospace Engr	9	123	886	65	11	9	80%	11.4
Microbiology	6	195	1,263	47	23	17	61%	15.0
Military Science	1	200	8,446	42	18	4	9%	0.4
Molecular Genetics	1	24	962	40	11	11	45%	5.0
Physics	13	363	1,024	50	17	33	64%	29.9
Plant Pathology	2	52	867	33	7	9	29%	5.2
Political Science	2	57	846	30	20	13	65%	9.6
Psychology	1	30	899	30	21	6	69%	4.2
Sch of Environ & Natural Res	1	20	1,374	69	20	20	100%	20.0
Schl of Phy Act & Educ Serv	2	109	2,103	40	19	11	34%	3.7
School of Communication	10	203	564	90	15	10	45%	14.4
School of Earth Sciences	8	214	1,086	43	18	16	66%	13.1
School of Music	11	524	816	44	18	21	40%	9.3
Science & Math Ed BSED	2	43	712	32	8	9	35%	7.0
Speech and Hearing	1	20	675	34	23	14	108%	15.1
Statistics	4	116	1,017	35	27	17	90%	15.1
Success Ctr	1	30	2,673	89	21	29	69%	19.6
Theatre	6	103	1,023	59	10	18	60%	10.8
Totals / Averages:	238	6,977	1,347	54	18	21	68%	17.0

MOST SCHEDULED UNITS

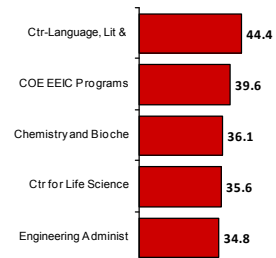
Weekly Room Hours:



Seats Filled:

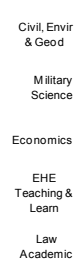


Weekly Seat Hours:

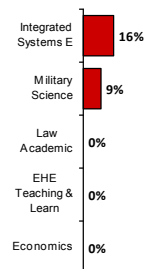


LEAST SCHEDULED UNITS

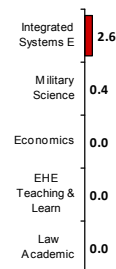
Weekly Room Hours:



Seats Filled:



Weekly Seat Hours:



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Space Needs Assessment by Space Category

	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic + Research Space								
Classrooms	533,871	670,183	(136,312)	529,476	670,183	(140,707)	670,183	(140,707)
Instructional Labs	849,742	1,017,402	(167,660)	874,326	1,017,402	(143,076)	1,017,402	(143,076)
<i>Class Laboratories</i>	467,556	645,046	(177,490)	505,738	645,046	(139,308)	645,046	(139,308)
<i>Open Laboratories</i>	382,186	372,356	9,830	368,588	372,356	(3,768)	372,356	(3,768)
Research Labs	1,360,289	1,498,414	(138,125)	1,448,681	1,498,414	(49,733)	1,637,950	(189,269)
Academic + Research Offices	2,461,334	2,585,560	(124,226)	2,502,258	2,585,560	(83,302)	2,628,795	(126,537)
Library + Study Space	477,015	622,053	(145,038)	479,851	622,053	(142,202)	622,053	(142,202)
Other Academic Space	460,158	501,263	(41,105)	469,689	501,263	(31,574)	501,263	(31,574)
Clinic Space	131,412	203,090	(71,678)	177,166	203,090	(25,924)	203,090	(25,924)
Vivaria	117,933	129,231	(11,298)	114,140	129,231	(15,091)	140,139	(25,999)
Academic + Research Space Total	6,391,754	7,227,196	(835,442)	6,595,587	7,227,196	(631,609)	7,420,875	(825,288)
Support Space								
Administrative Offices	700,214	626,255	73,959	723,446	626,255	97,191	626,255	97,191
Other Administrative Space	163,818	171,754	(7,936)	161,456	171,754	(10,298)	171,754	(10,298)
Assembly + Exhibit Space	109,891	207,378	(97,487)	110,871	207,378	(96,507)	207,378	(96,507)
Conference/Event Center	514,855	514,855	0	514,855	514,855	0	514,855	0
Athletic Space	736,012	900,000	(163,988)	846,123	900,000	(53,877)	900,000	(53,877)
Physical Plant	285,864	377,681	(91,817)	284,887	387,398	(102,511)	406,847	(121,960)
Support Space Total	2,510,654	2,797,923	(287,269)	2,641,638	2,807,640	(166,002)	2,827,089	(185,451)
Student Space								
Student Centered	239,067	349,932	(110,865)	239,343	349,932	(110,589)	349,932	(110,589)
Student Health	21,597	26,540	(4,943)	21,597	26,540	(4,943)	26,540	(4,943)
PE / Recreation	403,791	455,165	(51,374)	403,791	455,165	(51,374)	455,165	(51,374)
Student Space Total	664,455	831,637	(167,182)	664,731	831,637	(166,906)	831,637	(166,906)
TOTAL	9,566,863	10,856,756	(1,289,893)	9,901,956	10,866,473	(964,517)	11,079,601	(1,177,645)

SPACE METRICS

The following section describes the different space metrics used to create the space needs assessment as well as each space category used in the assessment. ***Space metrics are not space entitlements.*** These metrics are used to determine magnitude and priority of need for a campus master planning exercise. As construction projects (new or renovation) are developed from this analysis, it might be that a lower or higher standard might be used when conducting a detailed program analysis.

The space metrics used in the Space Needs Assessment for Ohio State are customized for the university based on its unique characteristics including mission, programs, location, and culture. These metrics might not be applicable to another institution. The consultant team's years of experience in space analytics and in instructional space design contributes to the space metrics selected. The team does not endorse a one-size-fits-all philosophy about space planning. For most space categories, there is more than one method of applying a space metric. The chosen method was based upon scope of services for the study and the applicability to Ohio State.

CLASSROOMS

Classroom space was calculated using 25 NASF per student seat with utilization targets of 35 weekly room hours (WRH) at a 70% seat fill ratio. These three factors produce a space metric of 1.02 NASF per weekly student contact hour (WSCH) calculated as follows: $[\text{NASF per student seat}] / ([\text{WRH target}] * [\text{seat fill ratio target}])$. This metric is applied on a course-by-course basis to all courses requiring a classroom as an instructional space. As an example, English 2265 section 0040, meets on Tuesdays and Thursdays from 2:20PM to 3:40PM for a total of three (3) weekly contact hours. The student enrollment of 18 students multiplied by the three (3) contact hours produces 54 weekly student contact hours. Multiplying the weekly student contact hours by the 1.02 NASF factor generates a total of 55.08 NASF of classroom space.

Generally speaking, more efficient use of classrooms can be achieved by making most classrooms general purpose under the purview of the Registrar and using centrally administered scheduling software. At many institutions where they successfully converted most classrooms from departmentally held rooms to general-purpose classrooms, first scheduling priority was given to the original department. A designated cut-off date during some point in the scheduling process was set and then the Registrar was given the authority to schedule other courses into the rooms. In order for this to be effective, a plan regarding the maintenance and payment for the replacement of both technology and furniture should be a discussion on campus as well as appropriate policies implemented to support those decisions.

A key factor when reviewing the needs for classrooms at Ohio State is that the existing average NASF per student seat is 20 NASF, whereas the space metric employed in the assessment is 25 NASF – a 20% increase in the space per student. This coupled with the fact that the percent seat fill rate is low suggests that many classrooms could be right-sized by removing some of the seats in the room.



Classrooms

	2014				Post Construction		Discovery Growth		
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)	
Academic: Main Campus									
College of Arts and Sciences	30,111	335,288	(305,177)	28,698	335,288	(306,590)	335,288	(306,590)	
Max M. Fisher College of Business	15,188	55,749	(40,561)	15,188	55,749	(40,561)	55,749	(40,561)	
College of Education and Human Ecology	11,427	36,951	(25,524)	11,427	36,951	(25,524)	36,951	(25,524)	
College of Engineering	11,079	70,287	(59,208)	11,079	70,287	(59,208)	70,287	(59,208)	
College of Food, Agriculture, and Environmental Science	9,545	28,203	(18,658)	9,545	28,203	(18,658)	28,203	(18,658)	
Moritz College of Law	20,062	6,329	13,733	20,062	6,329	13,733	6,329	13,733	
John Glenn College of Public Affairs	526	2,602	(2,076)	526	2,602	(2,076)	2,602	(2,076)	
College of Social Work	54	8,218	(8,164)	54	8,218	(8,164)	8,218	(8,164)	
University Libraries	888	0	888	888	0	888	0	888	
Academic Affairs	6,015	20,401	(14,386)	6,007	20,401	(14,394)	20,401	(14,394)	
Classroom Pool	343,586	0	343,586	341,113	0	341,113	0	341,113	
Academic: Main Campus Total	448,481	564,028	(115,547)	444,587	564,028	(119,441)	564,028	(119,441)	
Academic: Health Sciences									
College of Dentistry	10,401	10,746	(345)	9,900	10,746	(846)	10,746	(846)	
College of Medicine	44,123	53,466	(9,343)	44,123	53,466	(9,343)	53,466	(9,343)	
College of Nursing	6,091	7,300	(1,209)	6,091	7,300	(1,209)	7,300	(1,209)	
College of Optometry	4,304	5,200	(896)	4,304	5,200	(896)	5,200	(896)	
College of Pharmacy	3,035	4,000	(965)	3,035	4,000	(965)	4,000	(965)	
College of Public Health	0	4,947	(4,947)	0	4,947	(4,947)	4,947	(4,947)	
College of Veterinary Medicine	16,911	20,467	(3,556)	16,911	20,467	(3,556)	20,467	(3,556)	
Health Sciences Cores, Centers, and Institutes	525	29	496	525	29	496	29	496	
Academic: Health Sciences Total	85,390	106,155	(20,765)	84,889	106,155	(21,266)	106,155	(21,266)	
CLASSROOMS TOTAL	533,871	670,183	(136,312)	529,476	670,183	(140,707)	670,183	(140,707)	

CLASS LABORATORIES

The methodology for applying space metrics to classrooms is identical for class laboratories except that the square footage per seat changes depending on the discipline as does the weekly room hour expectation. The metrics are applied on a course-by-course basis, and sometimes different metrics can be applied to a discipline based upon the type of class laboratory needed for the course. For example, a physics course may need a physics laboratory metric or a computer lab metric depending on what is being taught and the methodology.

Class laboratories do not have the same weekly room hour expectations as classrooms. This is for a variety of reasons. It is assumed that some laboratories are used beyond regularly scheduled times as “open access” environments such as art studios and that other laboratories have setup and break down times such as in the case of chemistry. However, because laboratories are costly and are generally space intensive, it is expected that when class laboratories are scheduled that the seat fill or occupancy rate be at 80%.

Because laboratories are perceived as being “owned” by the unit, quite often the laboratory component of a course does not get reported to the Registrar. This lack of reporting results in a perception that the space is not being used and is consequently supported in the space assessment because there is not any documentation to generate the need for the space.

The units with the greatest need for laboratory space include units in Chemistry + Biochemistry, Evolution, Ecology, + Organismal Biology, Physics, and Engineering. The overall deficit in class laboratories is slightly reduced in the post-construction comparative view due to capital investment underway.

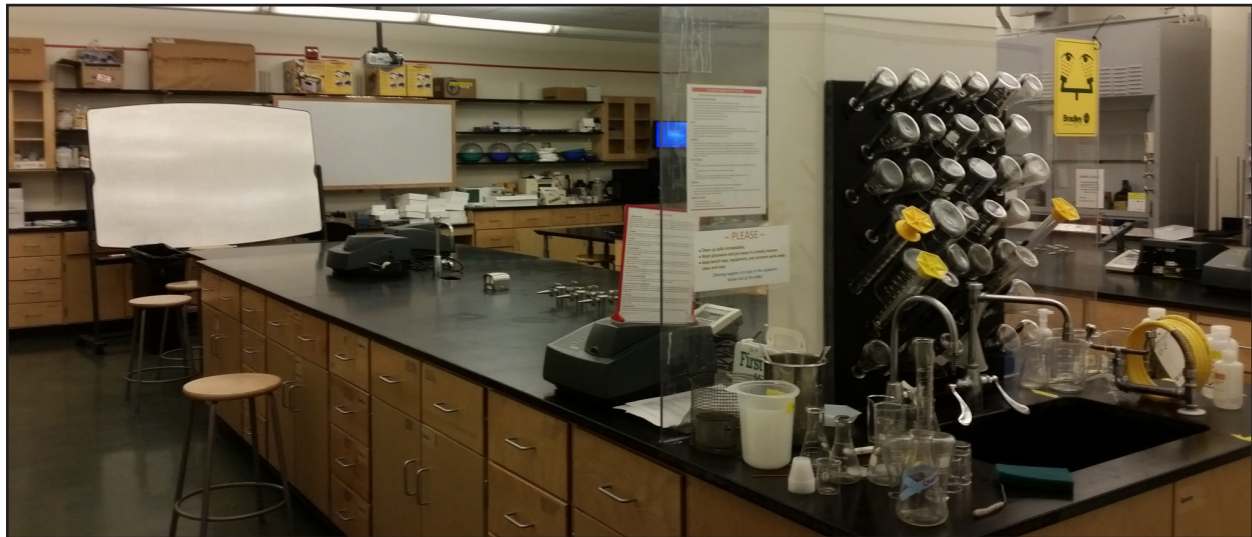


Class Laboratory Space Metrics

Use Expectations

Discipline	Weekly Room Hours	Seat Fill Rate	NASF per Seat*	NASF per WSCH
Arts and Sciences				
Theatre	24	80%	65.0	3.39
Graphic Design / Journalism / Broadcasting	24	80%	60.0	3.13
Anthropology	24	80%	38.5	2.01
Ceramics / Sculpture / Glass	20	80%	104.0	6.50
Dance	20	80%	100.0	6.25
Art (General / Multi-Media)	20	80%	78.0	4.88
Chemistry, Physics	20	80%	75.0	4.69
Biological Sciences	20	80%	70.0	4.38
Drawing / Painting	20	80%	65.0	4.06
Astronomy, Geography, Geology	20	80%	60.0	3.75
Psychology	20	80%	50.0	3.13
Music	20	80%	45.0	2.81
Architecture	12	80%	80.0	8.33
Art History	12	80%	35.0	3.65
Dentistry				
Health Professions (except Medicine)	20	80%	80.0	5.00
Education and Human Ecology				
Graphic Design / Journalism / Broadcasting	24	80%	60.0	3.13
Food Science & Technology	20	80%	80.0	5.00
Kinesiology	20	80%	65.0	4.06
Psychology	20	80%	50.0	3.13
Education	20	80%	45.0	2.81
Engineering				
Graphic Design / Journalism / Broadcasting	24	80%	60.0	3.13
Industrial & Management Engineering	20	80%	300.0	18.75
Mechanical Engineering	20	80%	140.0	8.75
Civil/Construction/Transport, Engineering	20	80%	120.0	7.50
Electrical/Electronics/Communications	20	80%	100.0	6.25
Metallurgy	20	80%	90.0	5.63
Chemistry	20	80%	75.0	4.69
Computer & Information Science	20	80%	60.0	3.75
Architecture	12	80%	80.0	8.33
Food, Agriculture, and Environmental Sciences				
Agricultural Engineering	20	80%	200.0	12.50
Animal Sciences	20	80%	90.0	5.63
Food Science & Technology	20	80%	80.0	5.00
Biological Sciences	20	80%	70.0	4.38
Communications	18	80%	50.0	3.47
Medicine				
Health Professions (except Medicine)	20	80%	80.0	5.00
Biological Sciences	20	80%	70.0	4.38
Pharmacy				
Chemistry	20	80%	75.0	4.69
Business				
Business Management	24	80%	50.0	2.60
General Computer Lab				
	24	80%	38.5	2.01

NASF = Net Assignable Square Feet; WSCH = Weekly Student Contact Hour



Class Laboratories

	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic: Main Campus								
College of Arts and Sciences	218,753	355,570	(136,817)	242,535	355,570	(113,035)	355,570	(113,035)
Max M. Fisher College of Business	1,355	2,681	(1,326)	1,355	2,681	(1,326)	2,681	(1,326)
College of Education and Human Ecology	14,140	11,380	2,760	14,140	11,380	2,760	11,380	2,760
College of Engineering	100,235	173,022	(72,787)	132,504	173,022	(40,518)	173,022	(40,518)
College of Food, Agriculture, and Environmental Science	49,421	40,218	9,203	49,421	40,218	9,203	40,218	9,203
Moritz College of Law	1,352	1,352	0	1,352	1,352	0	1,352	0
John Glenn College of Public Affairs	1,251	1,630	(379)	1,251	1,630	(379)	1,630	(379)
College of Social Work	0	318	(318)	0	318	(318)	318	(318)
Academic Affairs	13,253	1,600	11,653	13,253	1,600	11,653	1,600	11,653
Classroom Pool	11,455	0	11,455	6,463	0	6,463	0	6,463
Academic: Main Campus Total	411,215	587,771	(176,556)	462,274	587,771	(125,497)	587,771	(125,497)
Academic: Health Sciences								
College of Dentistry	13,025	9,688	3,337	0	9,688	(9,688)	9,688	(9,688)
College of Medicine	18,425	25,416	(6,991)	18,573	25,416	(6,843)	25,416	(6,843)
College of Nursing	274	274	0	274	274	0	274	0
College of Optometry	4,743	4,743	0	4,743	4,743	0	4,743	0
College of Pharmacy	2,773	2,773	0	2,773	2,773	0	2,773	0
College of Public Health	816	778	38	816	778	38	778	38
College of Veterinary Medicine	13,603	13,603	0	13,603	13,603	0	13,603	0
Health Sciences Cores, Centers, and Institutes	9	0	9	9	0	9	0	9
Academic: Health Sciences Total	53,668	57,275	(3,607)	40,791	57,275	(16,484)	57,275	(16,484)
Administrative								
Student Life	2,673	0	2,673	2,673	0	2,673	0	2,673
Administrative Total	2,673	0	2,673	2,673	0	2,673	0	2,673
CLASS LABORATORIES TOTAL	467,556	645,046	(177,490)	505,738	645,046	(139,308)	645,046	(139,308)

OPEN LABORATORIES

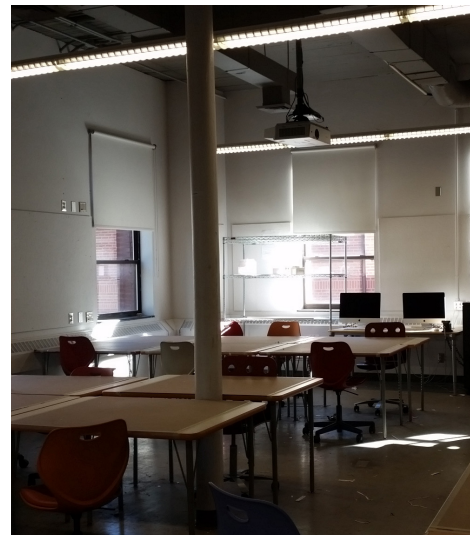
Open laboratories can resemble class laboratories with the exception that they are irregularly scheduled or not scheduled at all. They can include open-access laboratories and might provide equipment to serve the needs of a particular discipline for group instruction or might be used for individual student experimentation, observation, or practice in a particular field of study. The key is that these spaces are typically not scheduled in a formal manner. Types of rooms included in this category include computer laboratories, language labs, learning labs, testing and tutorial labs, music practice rooms, and individual art studios. Undergraduate research and senior capstone spaces could also be considered in this category.

This space category is not specifically addressed by most space guideline systems. In many benchmarking studies conducted by the consultant, a range of between five and 10 NASF per student FTE is the norm. The metric applied in this space category is 6.5 NASF per student FTE on the Main Campus and 11.5 on the Health Sciences Campus. The total amount of space generated in this category is then portioned out among Ohio State departments based upon existing space allocations, program plans, and needs identified throughout the on-site work sessions.



Open Laboratories

	2014			Post Construction			Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic: Main Campus								
College of Arts and Sciences	97,065	98,397	(1,332)	98,383	98,397	(14)	98,397	(14)
Max M. Fisher College of Business	8,506	8,506	0	8,506	8,506	0	8,506	0
College of Education and Human Ecology	8,750	8,750	0	8,750	8,750	0	8,750	0
College of Engineering	159,744	133,207	26,537	133,085	133,207	(122)	133,207	(122)
College of Food, Agriculture, and Environmental Science	20,095	20,095	0	20,095	20,095	0	20,095	0
Moritz College of Law	1,921	1,921	0	1,921	1,921	0	1,921	0
John Glenn College of Public Affairs	3,900	3,900	0	3,900	3,900	0	3,900	0
Academic Affairs	22,388	25,372	(2,984)	22,388	25,372	(2,984)	25,372	(2,984)
Classroom Pool	1,620	6,880	(5,260)	1,620	6,880	(5,260)	6,880	(5,260)
Academic: Main Campus Total	323,989	307,028	16,961	298,648	307,028	(8,380)	307,028	(8,380)
Academic: Health Sciences								
College of Dentistry	1,727	3,782	(2,055)	13,470	3,782	9,688	3,782	9,688
College of Medicine	15,095	15,094	1	15,095	15,094	1	15,094	1
College of Nursing	5,923	11,000	(5,077)	5,923	11,000	(5,077)	11,000	(5,077)
College of Optometry	422	422	0	422	422	0	422	0
College of Pharmacy	6,555	6,555	0	6,555	6,555	0	6,555	0
College of Public Health	1,316	1,316	0	1,316	1,316	0	1,316	0
College of Veterinary Medicine	13,113	13,113	0	13,113	13,113	0	13,113	0
Health Sciences Cores, Centers, and Institutes	3,289	3,289	0	3,289	3,289	0	3,289	0
Academic: Health Sciences Total	47,440	54,571	(7,131)	59,183	54,571	4,612	54,571	4,612
Administrative								
Athletics	8,625	8,625	0	8,625	8,625	0	8,625	0
Business Advancement	455	455	0	455	455	0	455	0
Student Life	1,677	1,677	0	1,677	1,677	0	1,677	0
Administrative Total	10,757	10,757	0	10,757	10,757	0	10,757	0



RESEARCH LABORATORIES

Research laboratories are spaces used for experimentation or training in research methods and observation. These spaces are not typically scheduled. The needs for research laboratories can be generated in several different manners. One is based on research and development expenditures, the second is based upon full-time tenured/tenure-track faculty, and the third is more detailed based upon principal investigators and the size of their research teams. For this study, full-time faculty was determined to be the best approach. Only full-time faculty with a title of Professor, Associate Professor, or Assistant Professor as well as Research faculty were included.

Modern research lab facilities are based on a 320 NASF module with as much as 100% of the lab module needed for research support and service spaces. The variations of this space metric depend on whether a single, double, or triple module was applied per eligible faculty member, the percent allocated for service space (ranging from zero to 100%). For Ohio State, the consultant team used a blended metric to account for the unique research needs in the different disciplines within the university. The existing inventory shows a deficit of approximately 138,000 NASF. The deficit decreases significantly once current construction completion; however there is a need for approximately 50,000 NASF. The Discovery Growth creates an additional need which then increases the deficit to about 189,000 NASF.

It's worth noting that very little of the new construction reduces the need for research in the College of Medicine. Conversely, the College of Arts + Sciences has a surplus of research space which increases with construction.

Research Laboratories

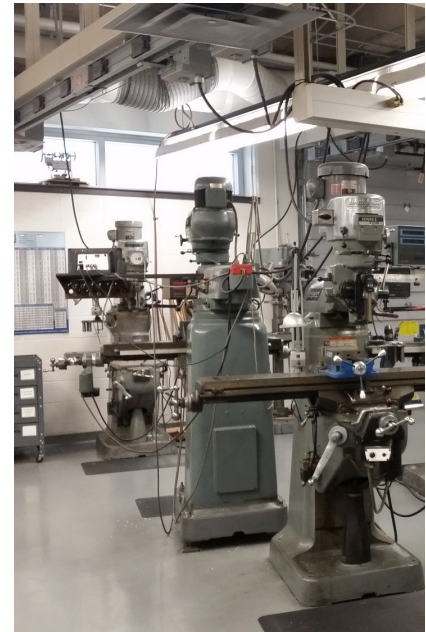
	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic: Main Campus								
College of Arts and Sciences	423,355	380,288	43,067	446,534	380,288	66,246	405,968	40,566
Max M. Fisher College of Business	116	116	0	116	116	0	436	(320)
College of Education and Human Ecology	12,703	12,350	353	12,703	12,350	353	12,670	33
College of Engineering	272,374	307,653	(35,279)	340,781	307,653	33,128	356,293	(15,512)
College of Food, Agriculture, and Environmental Science	142,563	169,263	(26,700)	142,563	169,263	(26,700)	194,863	(52,300)
Moritz College of Law	0	0	0	0	0	0	160	(160)
John Glenn College of Public Affairs	0	0	0	0	0	0	320	(320)
Academic Affairs	37,738	48,759	(11,021)	45,394	48,759	(3,365)	51,343	(5,949)
Academic: Main Campus Total	888,849	918,429	(29,580)	988,091	918,429	69,662	1,022,053	(33,962)
Academic: Health Sciences								
College of Dentistry	23,250	22,660	590	2,500	22,660	(20,160)	22,660	(20,160)
College of Medicine	278,623	348,800	(70,177)	288,523	348,800	(60,277)	360,320	(71,797)
College of Nursing	1,694	4,500	(2,806)	1,694	4,500	(2,806)	4,500	(2,806)
College of Optometry	8,727	9,120	(393)	8,727	9,120	(393)	9,120	(393)
College of Pharmacy	47,470	42,240	5,230	47,470	42,240	5,230	51,200	(3,730)
College of Public Health	7,008	7,920	(912)	7,008	7,920	(912)	10,800	(3,792)
College of Veterinary Medicine	54,061	60,160	(6,099)	54,061	60,160	(6,099)	64,960	(10,899)
Health Sciences Cores, Centers, and Institutes	50,607	84,585	(33,978)	50,607	84,585	(33,978)	92,337	(41,730)
Academic: Health Sciences Total	471,440	579,985	(108,545)	460,590	579,985	(119,395)	615,897	(155,307)
RESEARCH LABORATORIES TOTAL	1,360,289	1,498,414	(138,125)	1,448,681	1,498,414	(49,733)	1,637,950	(189,269)

Research Laboratories + Service

Total NASF applied per tenured/tenure-track faculty as appropriate

Disciplines / Programs	Module = 320 NASF No. of Modules	Percent Service Factor	Total NASF per T/TT Faculty
Geography	0.25	0%	80
Human Sciences	0.50	0%	160
Public Health; Communication	0.75	0%	240
Astronomy	1.00	0%	320
Speech & Hearing; Dentistry; Computer Science & Engineering;	1.00	50%	480
Anthropology; Biomedical Engineering; Animal Sciences; Optometry	1.00	100%	640
Medicine; Psychology; Electrical & Computer Engineering	2.00	50%	960
Microbiology; Physics; Civil, Environmental & Geod Engineering; Integrated Systems Engineering; Mechanical & Aerospace Engineering; Horticulture & Crop Science; Plant Pathology; Pharmacy; Veterinary Medicine	2.00	100%	1,280
Chemistry & Biochemistry; EEOB; Molecular Genetics; Chemical & Biomolecular Engineering; Materials Science Engineering; Food, Agr & Biological Engineering	3.00	100%	1,920
Food Science & Technology	4.00	100%	2,560
Other disciplines evaluated on an individual basis	varies	varies	n/a

NOTE: Based on a research module size of 320 NASF with a percentage for service space.



OFFICE SPACE

Office space includes not only the physical office spaces but office service such as filing rooms, office supply closets, and most importantly, departmental conference rooms and conference room service. The office service space category might also include office suite circulation space that can have a major impact on the amount of space proposed for a unit.

Ohio State supplied the consultants with a person-by-person employee file which included department, job title, and employee category. Guidelines were applied on a per headcount basis based upon title and job function. An additional space guideline is applied for office service space and conference room space for eligible employees.

The office space metrics range between 52 NASF per employee to 400 NASF per employee. Of course, only University leadership received the larger space guidelines. The most common guideline applied was 140 NASF per employee or faculty. In addition to the office guidelines, 30 NASF per eligible employee was applied for office service, and 25 NASF per eligible employee was applied for conference room space.

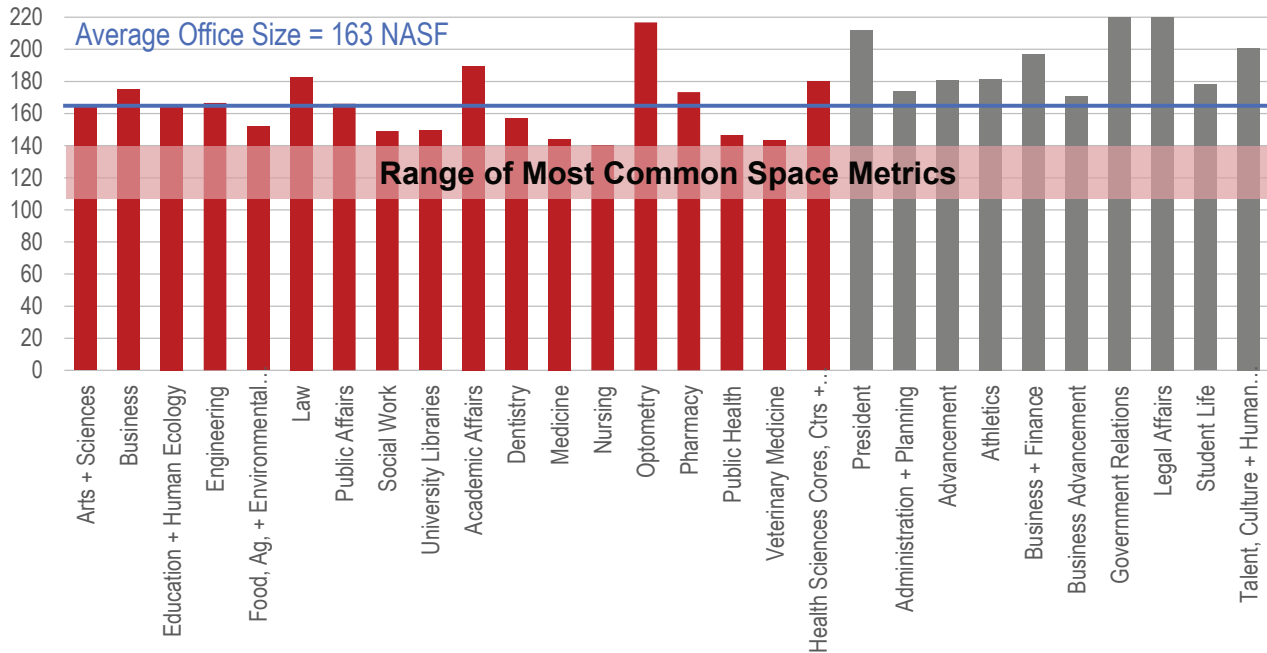
The average office size is 169 NASF and 150 NASF per room on the Main Campus and Health Sciences Campus respectively. These averages are higher than the average metric of 140 NASF as well as a typical planning standard of 120 NASF. The averages vary by unit and by building. Some offices were created in buildings constructed in eras prior to module furniture and digitization, which creates larger-than-normal office sizes. Others were just constructed at a larger standard.

The Health Sciences Campus is a larger driver of need in the academic and research office category, which represents a need not only for actual offices but conference space as well.

The following pages contain the outcomes of the office space needs assessment.

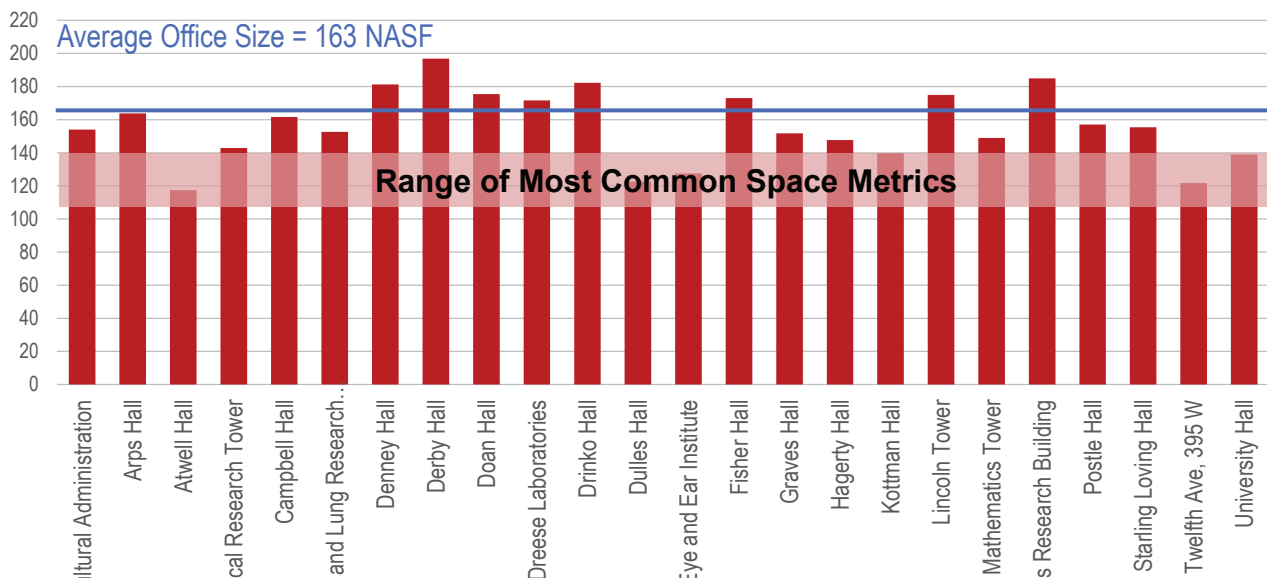


Average Office Size by Primary Unit



Average Office Size by Building

(for buildings with more than 70 offices)



Office Space Metric by Employee Type

Employee Type: <i>Applied per Headcount</i>	Office NASF	Conference NASF	Service NASF
Executive / Administrative / Managerial	180-400	25	30
FT Faculty including Research	140	25	30
Studio Faculty Offices	200	25	30
Faculty (FT Non Tenure Track) including Instructors and Lecturers	120	0	30
Clinical Faculty	120	25	30
Part-time Faculty including Retirees, Lecturers, Research	72	0	0
Professional Non-Faculty including those Skilled Craft and Service & Maintenance Supervisors that require offices	140	25	30
Healthcare (Open Office)	52	25	30
Support Staff	120	25	30



Academic + Research Offices

	2014			Post Construction			Discovery Growth		
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)	
Academic: Main Campus									
College of Arts and Sciences	689,278	632,893	56,385	693,210	632,893	60,317	649,248	102,815	
Max M. Fisher College of Business	97,114	77,761	19,353	97,114	77,761	19,353	78,716	18,398	
College of Education and Human Ecology	170,512	129,359	41,153	170,512	129,359	41,153	129,924	40,588	
College of Engineering	273,280	254,032	19,248	301,414	254,032	47,382	263,837	(21,276)	
College of Food, Agriculture, and Environmental Science	143,078	194,672	(51,594)	143,078	194,672	(51,594)	199,857	(56,779)	
Moritz College of Law	41,660	25,390	16,270	41,660	25,390	16,270	25,955	15,705	
John Glenn College of Public Affairs	22,402	13,605	8,797	22,402	13,605	8,797	14,170	8,232	
College of Social Work	16,978	21,210	(4,232)	16,978	21,210	(4,232)	21,210	(4,232)	
University Libraries	68,697	45,461	23,236	68,697	45,461	23,236	45,461	23,236	
Academic Affairs	325,534	354,944	(29,410)	325,915	354,944	(29,029)	354,944	(29,029)	
Classroom Pool	1,073	0	1,073	1,073	0	1,073	0	1,073	
Academic: Main Campus Total	1,849,606	1,749,327	100,279	1,882,053	1,749,327	132,726	1,783,322	98,731	
Academic: Health Sciences									
College of Dentistry	42,332	52,601	(10,269)	47,212	52,601	(5,389)	52,601	(5,389)	
College of Medicine	361,294	547,239	(185,945)	364,891	547,239	(182,348)	550,319	(185,428)	
College of Nursing	16,917	32,522	(15,605)	16,917	32,522	(15,605)	32,522	(15,605)	
College of Optometry	25,145	21,852	3,293	25,145	21,852	3,293	21,852	3,293	
College of Pharmacy	30,347	39,818	(9,471)	30,347	39,818	(9,471)	41,553	(11,206)	
College of Public Health	21,930	25,469	(3,539)	21,930	25,469	(3,539)	28,549	(6,619)	
College of Veterinary Medicine	49,404	73,084	(23,680)	49,404	73,084	(23,680)	74,429	(25,025)	
Health Sciences Cores, Centers, and Institutes	64,359	43,648	20,711	64,359	43,648	20,711	43,648	20,711	
Academic: Health Sciences Total	611,728	836,233	(224,505)	620,205	836,233	(216,028)	845,473	(225,268)	
ACADEMIC + RESEARCH OFFICES TOTAL	2,461,334	2,585,560	(124,226)	2,502,258	2,585,560	(83,302)	2,628,795	(126,537)	

Administrative Offices

	2014			Post Construction			Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Administrative								
President	4,652	4,095	557	4,652	4,095	557	4,095	557
Administration and Planning	102,645	90,094	12,551	98,109	90,094	8,015	90,094	8,015
Advancement	93,036	92,041	995	93,036	92,041	995	92,041	995
Athletics	106,031	77,567	28,464	134,261	77,567	56,694	77,567	56,694
Business and Finance	84,607	64,139	20,468	84,607	64,139	20,468	64,139	20,468
Business Advancement	33,779	29,215	4,564	37,579	29,215	8,364	29,215	8,364
Government Relations	2,378	2,965	(587)	2,378	2,965	(587)	2,965	(587)
Legal Affairs	11,362	9,980	1,382	11,362	9,980	1,382	9,980	1,382
Student Life	248,287	222,325	25,962	244,025	222,325	21,700	222,325	21,700
Talent, Culture, and Human Resources	11,893	32,394	(20,501)	11,893	32,394	(20,501)	32,394	(20,501)
Board of Trustees	1,544	1,440	104	1,544	1,440	104	1,440	104
Administrative Total	700,214	626,255	73,959	723,446	626,255	97,191	626,255	97,191
ADMINISTRATIVE OFFICES TOTAL	700,214	626,255	73,959	723,446	626,255	97,191	626,255	97,191

LIBRARY + STUDY SPACE

Library and Study space is a comprehensive category that includes space found within Universities Libraries such as Eighteenth Avenue Library and Thompson Library. The libraries included are: Health Sciences; Vet Medicine; Pharmacy; Law; Geology; Architecture; Fine Arts; Cartoon; and Food, Agriculture, and Environmental Sciences. Informal collaborative learning spaces and study spaces are also included in this category. Examples of such space are University Hall, Smith Laboratory Building, and Bevis Hall.

Library space is developed based upon three factors: collection size, study stations, and service space which includes back-of-house functions and circulation and reference desks. There are a variety of collections at Ohio State. Once the collection counts were converted to physical volume equivalents, there are approximately 6.1M physical volume equivalents at Ohio State – 4.5M are housed at the Library Book Depository or another storage facility. For this assessment, no growth in collections is assumed. For study stations, the consultant team assumed 12% of the students should be accommodated. Finally, 10% of the total stack space and study space was used for service space.

18th Avenue and Thompson Libraries plus Depository

Collection & Study Space Calculations

Collection Space

Shelving Type	Volume Equivalents	NASF per Volume	2014 Collection Space
Regular Shelving	1,584,829	0.070	110,938
Depository	4,500,000	0.006	27,000

Study Space

Scenario	Student FTE	Percent of Students	Study Stations
Fall 2014	48,582	12%	5,830
NASF per Study Station			35

Library & Study Space Analysis

	Proposed NASF	Existing Space	Overage/ (Need)
Stack Space	137,938	90,339	(47,599)
Study Space	204,050	152,358	(51,692)
Total Stack & Study Space	341,988	242,697	(99,291)
Service Space @ 10%	34,199	20,459	(13,740)
TOTAL LIBRARY & STUDY SPACE	376,187	263,156	(113,031)



Library and Study Space

	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic: Main Campus								
College of Arts and Sciences	16,534	17,834	(1,300)	17,628	17,834	(206)	17,834	(206)
Max M. Fisher College of Business	4,167	4,167	0	4,167	4,167	0	4,167	0
College of Education and Human Ecology	7,136	7,136	0	7,136	7,136	0	7,136	0
College of Engineering	3,077	3,077	0	3,077	3,077	0	3,077	0
College of Food, Agriculture, and Environmental Science	13,498	15,891	(2,393)	13,498	15,891	(2,393)	15,891	(2,393)
Moritz College of Law	75,396	78,085	(2,689)	75,396	78,085	(2,689)	78,085	(2,689)
College of Social Work	1,532	1,531	1	1,532	1,531	1	1,531	1
University Libraries	300,669	397,910	(97,241)	300,669	397,910	(97,241)	397,910	(97,241)
Academic Affairs	0	750	(750)	0	750	(750)	750	(750)
Classroom Pool	6,254	34,204	(27,950)	6,254	34,204	(27,950)	34,204	(27,950)
Academic: Main Campus Total	428,263	560,585	(132,322)	429,357	560,585	(131,228)	560,585	(131,228)
Academic: Health Sciences								
College of Dentistry	988	4,177	(3,189)	2,730	4,177	(1,447)	4,177	(1,447)
College of Medicine	5,650	5,650	0	5,650	5,650	0	5,650	0
College of Nursing	995	6,088	(5,093)	995	6,088	(5,093)	6,088	(5,093)
College of Optometry	1,552	2,600	(1,048)	1,552	2,600	(1,048)	2,600	(1,048)
College of Pharmacy	0	2,500	(2,500)	0	2,500	(2,500)	2,500	(2,500)
College of Veterinary Medicine	284	454	(170)	284	454	(170)	454	(170)
Health Sciences Cores, Centers, and Institutes	39,283	39,999	(716)	39,283	39,999	(716)	39,999	(716)
Academic: Health Sciences Total	48,752	61,468	(12,716)	50,494	61,468	(10,974)	61,468	(10,974)
LIBRARY AND STUDY SPACE TOTAL	477,015	622,053	(145,038)	479,851	622,053	(142,202)	622,053	(142,202)



OTHER ACADEMIC + ADMINISTRATIVE SPACE

Other department space is space that does not fit into the other space classifications. It includes spaces such as media production rooms – television, radio, newspapers, and curriculum development; greenhouse space; clinics; computer repair spaces; study halls; meeting rooms or classrooms that are not available for general scheduling; faculty development and support centers; and departmental resource rooms, lounges, and storage. Because this space is so diverse most guideline systems do not address these space types.

Benchmarking has shown that this space can range from as low as 3 NASF/Student FTE to as much as 25 NASF/Student FTE depending on the programs of the institution. Unlike some of the other space categories, this category tends to increase with time, programs, and growth in enrollment and research. There are typically no efficiencies to gain. For this assessment, a metric of 8.5 NASF/Student and 16.5 NASF/Student was used for other academic space on the Main Campus and the Health Sciences Campus respectively. A metric of 3.5 NASF/Student was used for other administrative space on the Main Campus. The Health Sciences Campus does not have any other administrative space.

There is a need for other academic space, which largely reflects needs within Military Science to adequately meet the needs of the ROTC program. There is need for simulation space, student locker rooms, and unit storage. Much of the additional need is being generated by program plans already in place at Ohio State.

The need in Other Administrative Space is being generated by the need for space within the university Police and the need for additional space in Disability Services.

Other Academic Space

	2014			Future Existing NASF	Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)		Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic: Main Campus								
College of Arts and Sciences	83,547	83,353	194	81,809	83,353	(1,544)	83,353	(1,544)
Max M. Fisher College of Business	11,185	11,185	0	11,185	11,185	0	11,185	0
College of Education and Human Ecology	34,209	34,209	0	34,209	34,209	0	34,209	0
College of Engineering	91,555	94,614	(3,059)	94,612	94,614	(2)	94,614	(2)
College of Food, Agriculture, and Environmental Science	80,724	80,831	(107)	80,724	80,831	(107)	80,831	(107)
Moritz College of Law	7,875	7,876	(1)	7,875	7,876	(1)	7,876	(1)
John Glenn College of Public Affairs	1,064	1,064	0	1,064	1,064	0	1,064	0
Academic Affairs	81,573	111,271	(29,698)	83,106	111,271	(28,165)	111,271	(28,165)
Classroom Pool	4,104	2,873	1,231	2,873	2,873	0	2,873	0
Academic: Main Campus Total	395,836	427,276	(31,440)	397,457	427,276	(29,819)	427,276	(29,819)
Academic: Health Sciences								
College of Dentistry	9,884	17,794	(7,910)	17,794	17,794	0	17,794	0
College of Medicine	24,922	24,922	0	24,922	24,922	0	24,922	0
College of Nursing	3,357	4,000	(643)	3,357	4,000	(643)	4,000	(643)
College of Optometry	2,888	4,000	(1,112)	2,888	4,000	(1,112)	4,000	(1,112)
College of Pharmacy	510	510	0	510	510	0	510	0
College of Public Health	815	815	0	815	815	0	815	0
College of Veterinary Medicine	16,527	16,527	0	16,527	16,527	0	16,527	0
Health Sciences Cores, Centers, and Institutes	5,419	5,419	0	5,419	5,419	0	5,419	0
Academic: Health Sciences Total	64,322	73,987	(9,665)	72,232	73,987	(1,755)	73,987	(1,755)
OTHER ACADEMIC SPACE TOTAL	460,158	501,263	(41,105)	469,689	501,263	(31,574)	501,263	(31,574)

Other Administrative Space

	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Administrative								
President	10,224	10,224	0	10,224	10,224	0	10,224	0
Administration and Planning	48,432	55,440	(7,008)	48,141	55,440	(7,299)	55,440	(7,299)
Advancement	27,079	27,079	0	27,079	27,079	0	27,079	0
Business and Finance	6,656	6,656	0	6,656	6,656	0	6,656	0
Business Advancement	4,724	4,724	0	4,724	4,724	0	4,724	0
Legal Affairs	175	175	0	175	175	0	175	0
Student Life	27,616	28,544	(928)	25,545	28,544	(2,999)	28,544	(2,999)
Talent, Culture, and Human Resources	38,912	38,912	0	38,912	38,912	0	38,912	0
Administrative Total	163,818	171,754	(7,936)	161,456	171,754	(10,298)	171,754	(10,298)
OTHER ADMINISTRATIVE SPACE TOTAL	163,818	171,754	(7,936)	161,456	171,754	(10,298)	171,754	(10,298)



CLINIC SPACE

The space in this category includes areas that provide direct support to academic programs and is mostly housed on the Health Sciences Campus. The metrics for clinical spaces were largely based upon feedback received in work sessions as well as the consultant's experience. At baseline year, there is a deficit of 72,000 NASF, but the need is reduced to 26,000 NASF in the Post Construction scenario.

Clinic/Vet Clinic

	2014			Post Construction			Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic: Main Campus								
College of Arts and Sciences	5,276	7,000	(1,724)	5,276	7,000	(1,724)	7,000	(1,724)
College of Education and Human Ecology	915	1,500	(585)	915	1,500	(585)	1,500	(585)
Academic: Main Campus Total	6,191	8,500	(2,309)	6,191	8,500	(2,309)	8,500	(2,309)
Academic: Health Sciences								
College of Dentistry	52,086	97,840	(45,754)	97,840	97,840	0	97,840	0
College of Medicine	12,364	12,364	0	12,364	12,364	0	12,364	0
College of Nursing	2,075	4,000	(1,925)	2,075	4,000	(1,925)	4,000	(1,925)
College of Optometry	18,416	18,416	0	18,416	18,416	0	18,416	0
College of Veterinary Medicine	34,535	56,225	(21,690)	34,535	56,225	(21,690)	56,225	(21,690)
Health Sciences Cores, Centers, and Institutes	5,745	5,745	0	5,745	5,745	0	5,745	0
Academic: Health Sciences Total	125,221	194,590	(69,369)	170,975	194,590	(23,615)	194,590	(23,615)
CLINIC/VET CLINIC TOTAL	131,412	203,090	(71,678)	177,166	203,090	(25,924)	203,090	(25,924)



VIVARIA

Vivaria space includes rooms used to house animals, cages, operating, recovering, quarantine spaces. The need for vivaria space is driven by the amount of research activity that requires a vivaria. Ranges are typically from 10-15% of the research space need minus research core space. For Ohio State, a metric of 15% of total wet lab research space generated in disciplines requiring vivaria was used



Vivaria

	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic: Main Campus								
College of Arts and Sciences	2,917	2,917	0	2,917	2,917	0	2,917	0
College of Food, Agriculture, and Environmental Science	1,779	1,779	0	1,779	1,779	0	1,779	0
Academic Affairs	111,255	122,553	(11,298)	107,462	122,553	(15,091)	133,461	(25,999)
Academic: Main Campus Total	115,951	127,249	(11,298)	112,158	127,249	(15,091)	138,157	(25,999)
Academic: Health Sciences								
College of Medicine	456	456	0	456	456	0	456	0
Health Sciences Cores, Centers, and Institutes	1,526	1,526	0	1,526	1,526	0	1,526	0
Academic: Health Sciences Total	1,982	1,982	0	1,982	1,982	0	1,982	0
VIVARIA TOTAL	117,933	129,231	(11,298)	114,140	129,231	(15,091)	140,139	(25,999)

CONFERENCE + EVENT CENTERS

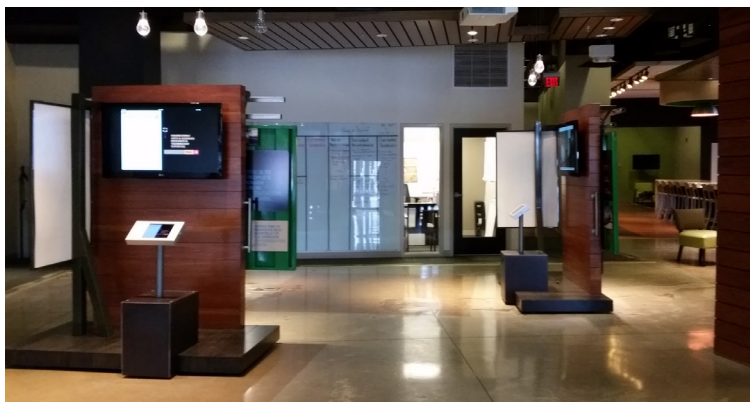
The amount of conference and event center space an institution has is based upon institutional initiatives. There is not a single space metric that can gauge the amount of space an institution should have in this category; therefore the existing space is the space needed. The majority of space in this category is in the Schottenstein Center and is under the purview of Business Advancement.

ASSEMBLY AND EXHIBIT SPACE

Assembly space is defined as any room designed and equipped for the assembly of large number of people. Spaces might include theatres, auditoriums, concert halls, and arenas. Exhibit space includes the display of materials, works of art, or artifacts such as a herbarium or rock specimen room. This space category only includes the spaces that support academic programs. Assembly spaces that are used for events and general student gatherings should be counted in other space categories.

A guideline that is still relevant today is one promulgated by the Council of Educational Facility Planners International. This guideline has a core allowance of 27,450 NASF for institutions with more than 5,000 students with an additional 4 NASF/Student FTE for student levels over the 5,000. A metric of 5,600 NASF was applied for the Health Sciences Campus.

Application of this guideline shows that Ohio State is short 92,000 NASF. Theatre and Music have the greatest needs in this category.



Assembly + Exhibit Space

	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic: Main Campus								
College of Arts and Sciences	84,389	171,436	(87,047)	84,389	171,436	(87,047)	171,436	(87,047)
College of Education and Human Ecology	6,705	6,705	0	6,705	6,705	0	6,705	0
College of Engineering	1,140	5,000	(3,860)	1,140	5,000	(3,860)	5,000	(3,860)
College of Food, Agriculture, and Environmental Science	6,381	6,381	0	6,381	6,381	0	6,381	0
University Libraries	7,021	7,021	0	7,021	7,021	0	7,021	0
Academic Affairs	4,255	5,235	(980)	5,235	5,235	0	5,235	0
Academic: Main Campus Total	109,891	201,778	(91,887)	110,871	201,778	(90,907)	201,778	(90,907)
Academic: Health Sciences								
College of Medicine	0	5,600	(5,600)	0	5,600	(5,600)	5,600	(5,600)
Academic: Health Sciences Total	0	5,600	(5,600)	0	5,600	(5,600)	5,600	(5,600)
ASSEMBLY + EXHIBIT SPACE TOTAL	109,891	207,378	(97,487)	110,871	207,378	(96,507)	207,378	(96,507)



ATHLETICS

Athletics space represents gymnasiums, court facilities, weight training, training facilities, indoor running tracks, and fitness centers as well as team meeting rooms, supporting locker room and shower/toilet facilities, equipment storage and check-out rooms, visiting team spaces, rehabilitation facilities, and spectator seating. Trophy rooms, museums, athletic visitor centers, prefunction entertainment space, concessions, and restaurants are also included. Space in this category is built for and used by intercollegiate athletics and/or to enhance sporting events.

The space need shown in this category is based upon the expansion of the Schottenstein Center and the need for expanded wrestling and ice hockey facilities. There is not a single benchmark or space metric that can be applied that would be appropriate to support the level of Ohio State's athletic program.

Athletic Space

	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Administrative								
Administration and Planning	1,947	1,947	0	1,947	1,947	0	1,947	0
Athletics	683,310	847,298	(163,988)	793,421	847,298	(53,877)	847,298	(53,877)
Business Advancement	50,755	50,755	0	50,755	50,755	0	50,755	0
Administrative Total	736,012	900,000	(163,988)	846,123	900,000	(53,877)	900,000	(53,877)
ATHLETIC SPACE TOTAL	736,012	900,000	(163,988)	846,123	900,000	(53,877)	900,000	(53,877)





PHYSICAL PLANT

Physical plant space includes maintenance shops, central storage and receiving, landscape services, greenhouses (non-academic), vehicle maintenance and storage space, and custodial services.

Due to its urban footprint, a guideline of four percent of all square footage on the Main Campus and three percent on the Health Sciences Campus was applied. The current need for physical plant is based upon existing square footages whereas the projected proposed NASF for physical plant space is based upon the recommended square footage minus physical plant.

On the Main Campus, there is a need for an additional 39,000 NASF, and on the Health Sciences Campus, the need is greater at 53,000 NASF. In the two other scenarios, the need increases at both campuses as additional space is brought online.

Physical Plant

	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Administrative								
Administration and Planning	189,520	268,333	(78,813)	188,543	275,099	(86,556)	292,467	(103,924)
Business and Finance	87,934	100,938	(13,004)	87,934	103,889	(15,955)	105,970	(18,036)
Business Advancement	2,057	2,057	0	2,057	2,057	0	2,057	0
Student Life	6,353	6,353	0	6,353	6,353	0	6,353	0
Administrative Total	285,864	377,681	(91,817)	284,887	387,398	(102,511)	406,847	(121,960)
PHYSICAL PLANT TOTAL	285,864	377,681	(91,817)	284,887	387,398	(102,511)	406,847	(121,960)

STUDENT-CENTERED SPACE

Student-centered space includes non-residential dining facilities, bookstores, ballrooms/meeting spaces, student lounges, student recreational facilities such as game and video rooms (not fitness facilities), and student government/club/organization offices and space. While referred to as a center or a union, quite often these spaces are dispersed throughout a campus.

Due to the size of the student body at Ohio State and the urban environment, the amount of space per student was scaled down. For this assessment, student-centered space was calculated at 6 NASF per Student headcount. The Health Sciences Campus has a need for almost three times its existing square footage while the Main Campus demonstrated a need for 40 percent more space.



Student Centered

	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic: Main Campus								
College of Arts and Sciences	2,645	2,645	0	2,645	2,645	0	2,645	0
Max M. Fisher College of Business	6,616	6,616	0	6,616	6,616	0	6,616	0
College of Education and Human Ecology	2,715	2,715	0	2,715	2,715	0	2,715	0
College of Engineering	7,408	10,061	(2,653)	9,108	10,061	(953)	10,061	(953)
College of Food, Agriculture, and Environmental Science	1,676	2,676	(1,000)	1,676	2,676	(1,000)	2,676	(1,000)
Moritz College of Law	6,228	6,228	0	6,228	6,228	0	6,228	0
University Libraries	4,456	4,456	0	4,456	4,456	0	4,456	0
Academic Affairs	1,788	3,288	(1,500)	1,788	3,288	(1,500)	3,288	(1,500)
Academic: Main Campus Total	33,532	38,685	(5,153)	35,232	38,685	(3,453)	38,685	(3,453)
Academic: Health Sciences								
College of Dentistry	2,427	5,000	(2,573)	1,003	5,000	(3,997)	5,000	(3,997)
College of Medicine	4,654	13,019	(8,365)	4,654	13,019	(8,365)	13,019	(8,365)
College of Nursing	393	1,100	(707)	393	1,100	(707)	1,100	(707)
College of Optometry	1,728	4,833	(3,105)	1,728	4,833	(3,105)	4,833	(3,105)
College of Pharmacy	1,863	5,212	(3,349)	1,863	5,212	(3,349)	5,212	(3,349)
College of Veterinary Medicine	493	1,379	(886)	493	1,379	(886)	1,379	(886)
Health Sciences Cores, Centers, and Institutes	325	909	(584)	325	909	(584)	909	(584)
Academic: Health Sciences Total	11,883	31,452	(19,569)	10,459	31,452	(20,993)	31,452	(20,993)
Administrative								
Administration and Planning	3,606	3,606	0	3,606	3,606	0	3,606	0
Business and Finance	11,751	11,751	0	11,751	11,751	0	11,751	0
Student Life	178,295	264,438	(86,143)	178,295	264,438	(86,143)	264,438	(86,143)
Administrative Total	193,652	279,795	(86,143)	193,652	279,795	(86,143)	279,795	(86,143)
STUDENT CENTERED TOTAL	239,067	349,932	(110,865)	239,343	349,932	(110,589)	349,932	(110,589)

PHYSICAL EDUCATION + RECREATION

The space types included in this category are the same as the Athletics category. The difference is that the space in this category is built for and used by education and recreation. The majority of space in this category is allocated to Rec Sports primarily housed in Adventure Recreation Center, Physical Activity and Education Services, Recreation and Physical Activity Center, McCorkle Aquatic Pavilion, and the Jesse Owens Recreation and Tennis Centers.

The space metric illustrated in the table is from Bareither + Schillinger's guidelines generated for the University of Illinois. The consultant has used this space metric many times as it is a good predictor of space needs. The indoor space required for physical education and recreation is based upon students. Again, due to Ohio State's urban environment and the size of the student body, this metric which is typically factored at 12.1 NASF per student was scaled down to 10.5 NASF per student for 100% of the undergraduate student population but only 25% of the graduate population and 15% of the non-student employees. With application of this metric, there is a need for an additional 31,000 NASF, primarily for Rec Sports. Military Science is also in need of this type of space in order to provide adequate space for its ROTC program.



Physical Education + Recreation

	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic: Main Campus								
College of Education and Human Ecology	8,856	12,375	(3,519)	8,856	12,375	(3,519)	12,375	(3,519)
Academic Affairs	0	11,500	(11,500)	0	11,500	(11,500)	10,000	(10,000)
Academic: Main Campus Total	8,856	23,875	(15,019)	8,856	23,875	(15,019)	22,375	(13,519)
Academic: Health Sciences								
Health Sciences Cores, Centers, and Institutes	1,272	6,500	(5,228)	1,272	6,500	(5,228)	6,500	(5,228)
Academic: Health Sciences Total	1,272	6,500	(5,228)	1,272	6,500	(5,228)	6,500	(5,228)
Administrative								
Student Life	393,663	424,790	(31,127)	393,663	424,790	(31,127)	426,290	(32,627)
Administrative Total	393,663	424,790	(31,127)	393,663	424,790	(31,127)	426,290	(32,627)
PHYSICAL EDUCATION + RECREATION TOTAL	403,791	455,165	(51,374)	403,791	455,165	(51,374)	455,165	(51,374)



STUDENT HEALTH CARE FACILITIES

Health care facilities includes both medical and counseling service space to support students. Office space is calculated separate from this metric. A NASF of 0.50 per Student headcount was used to generate the need for space. Application of this metric generated a need for 5,000 NASF, which is a 23 percent increase. Like universities nationwide, Ohio State is experiencing a demand for more services for today's student population especially in the area of counseling.

Student Health

	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Administrative								
Student Life	21,597	26,540	(4,943)	21,597	26,540	(4,943)	26,540	(4,943)
Administrative Total	21,597	26,540	(4,943)	21,597	26,540	(4,943)	26,540	(4,943)
STUDENT HEALTH TOTAL	21,597	26,540	(4,943)	21,597	26,540	(4,943)	26,540	(4,943)



Space Needs Assessment by Primary Unit

	2014				Post Construction		Discovery Growth	
	Existing NASF	Proposed NASF	Overage/ (Need)	Future Existing NASF	Proposed NASF	Overage/ (Need)	Proposed NASF	Overage/ (Need)
Academic: Main Campus								
College of Arts and Sciences	1,623,759	1,752,333	(128,574)	1,675,326	1,752,333	(77,007)	1,794,368	(60,189)
Max M. Fisher College of Business	129,059	111,032	18,027	129,059	111,032	18,027	112,307	16,752
College of Education and Human Ecology	266,641	226,479	40,162	266,641	226,479	40,162	227,364	39,277
College of Engineering	908,813	980,666	(71,853)	1,015,721	980,666	35,055	1,039,111	(82,243)
College of Food, Agriculture, and Environmental Science	477,419	550,010	(72,591)	477,419	550,010	(72,591)	580,795	(103,376)
Moritz College of Law	134,432	120,852	13,580	134,432	120,852	13,580	121,577	12,855
John Glenn College of Public Affairs	28,617	20,199	8,418	28,617	20,199	8,418	21,084	7,533
College of Social Work	18,510	23,059	(4,549)	18,510	23,059	(4,549)	23,059	(4,549)
University Libraries	380,843	454,848	(74,005)	380,843	454,848	(74,005)	454,848	(74,005)
Academic Affairs	676,367	763,855	(87,488)	683,124	763,855	(80,731)	775,847	(92,723)
Classroom Pool	24,506	43,957	(19,451)	18,283	43,957	(25,674)	43,957	(25,674)
Classrooms	448,481	564,028	(115,547)	444,587	564,028	(119,441)	564,028	(119,441)
Academic: Main Campus Total	5,117,447	5,611,318	(493,871)	5,272,562	5,611,318	(338,756)	5,758,345	(485,783)
Academic: Health Sciences								
College of Dentistry	145,719	213,542	(67,823)	182,549	213,542	(30,993)	213,542	(30,993)
College of Medicine	721,483	998,560	(277,077)	735,128	998,560	(263,432)	1,013,160	(278,032)
College of Nursing	31,628	63,484	(31,856)	31,628	63,484	(31,856)	63,484	(31,856)
College of Optometry	63,621	65,986	(2,365)	63,621	65,986	(2,365)	65,986	(2,365)
College of Pharmacy	89,518	99,608	(10,090)	89,518	99,608	(10,090)	110,303	(20,785)
College of Public Health	31,885	36,298	(4,413)	31,885	36,298	(4,413)	42,258	(10,373)
College of Veterinary Medicine	182,020	234,545	(52,525)	182,020	234,545	(52,525)	240,690	(58,670)
Health Sciences Cores, Centers, and Institutes	171,834	191,620	(19,786)	171,834	191,620	(19,786)	199,372	(27,538)
Classrooms	85,390	106,155	(20,765)	84,889	106,155	(21,266)	106,155	(21,266)
Academic: Health Sciences Total	1,523,098	2,009,798	(486,700)	1,573,072	2,009,798	(436,726)	2,054,950	(481,878)
Administrative								
President	14,876	14,319	557	14,876	14,319	557	14,319	557
Administration and Planning	346,150	419,420	(73,270)	340,346	426,186	(85,840)	443,554	(103,208)
Advancement	133,872	132,877	995	133,872	132,877	995	132,877	995
Athletics	797,966	933,490	(135,524)	936,307	933,490	2,817	933,490	2,817
Business and Finance	190,948	183,484	7,464	190,948	186,435	4,513	188,516	2,432
Business Advancement	450,885	446,321	4,564	454,685	446,321	8,364	446,321	8,364
Government Relations	2,378	2,965	(587)	2,378	2,965	(587)	2,965	(587)
Legal Affairs	11,537	10,155	1,382	11,537	10,155	1,382	10,155	1,382
Student Life	925,357	1,019,863	(94,506)	919,024	1,019,863	(100,839)	1,021,363	(102,339)
Talent, Culture, and Human Resources	50,805	71,306	(20,501)	50,805	71,306	(20,501)	71,306	(20,501)
Board of Trustees	1,544	1,440	104	1,544	1,440	104	1,440	104
Administrative Total	2,926,318	3,235,640	(309,322)	3,056,322	3,245,357	(189,035)	3,266,306	(209,984)
TOTAL	9,566,863	10,856,756	(1,289,893)	9,901,956	10,866,473	(964,517)	11,079,601	(1,177,645)