University of Connecticut
Torrington Campus

Space Needs Analysis
for the
Campus Master Plan

May 2004

Prepared by

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SPACE NEEDS ANALYSIS
FOR THE CAMPUS MASTER PLAN
UNIVERSITY OF CONNECTICUT - TORRINGTON CAMPUS

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1.0 KEY FINDINGS AT A GLANCE

- The classroom utilization was slightly below normally used guidelines. It averaged 26 hours of scheduled use per week, at 52% seats filled when the rooms were scheduled. Individual room use ranged from 45 hours to 10 hours.

- Laboratory utilization was very low. After moving the wet lab sections to the community college, the laboratories averaged less than five scheduled hours per week. The Art instructor was on sabbatical during the base term, which contributed to the low numbers.

- The enrollment growth projected by UConn for this study was an increase of 50 full-time equivalent students. The target numbers are 277 FTE which translates to 462 headcount students.

- Applying recognized guidelines, the need for additional academic space is minimal since there is underused capacity. A computer laboratory has been identified as a need and was included in the assumptions.

- The consultants note the need for some exhibit space and additional student union spaces. The existing cafeteria and game room space seem to be heavily utilized and quite crowded.

- The overall need was just under 2,500 assignable square feet, using base year enrollments and staffing and approximately 5,500 assignable square feet using target year enrollments and staffing. The target year need is a 25% increase over space currently available.

- The finding on a space per full-time equivalent student is approximately 100 assignable square feet per student. This compares to 97 assignable square feet per full-time equivalent student at the current levels.

2.0 INTRODUCTION

Paulien & Associates, Inc. of Denver, Colorado was contracted in February 2003 to conduct several studies for the University of Connecticut; a Classroom & Utilization Study, Classroom Mix Study, and Analysis by Space Type as part of the Storrs Campus Master Plan Update, as being developed under the leadership of SmithGroup JJR, in Ann Arbor, Michigan. A study of the Torrington Campus was added in the summer of 2003.

As part of the University of Connecticut's umbrella of regional campuses, this study examines the space needs for the University of Connecticut - Torrington Campus, part of the Tri-Campus System. Regional sites in West Hartford, Torrington and Waterbury make up the UConn Tri-Campus. The University's other regional campuses across the state, and other separately housed units like the School of Law, are not part of this analysis. As part of the Tri-Campus system, Torrington students can elect to take the same classes at other locations.

The Torrington Campus was built in 1965 to provide higher education offerings to the surrounding rural communities in the Northwest corner of the state and the town of Torrington. Traditionally, the campus focused on the Bachelors of General Studies, developing individualized interdisciplinary programs of study and is now in the process of expanding degree offerings.

3.0 PROCESS

University of Connecticut representatives provided the consultants with background information including room-by-room floor plans, course data, and staffing information from Fall 2003. The consultants pulled relevant data from the floor plans to create a facilities database and performed an on-site verification of space in mid-October 2003. The consultants utilized the data for a draft of the space needs analysis. In February 2004, University of Connecticut administration provided the consultants with revised student enrollment and staffing information. This report reflects these new parameters.

In conducting the space needs analysis, the consultants visited the campus in late October 2003 and met with Tri-Campus administration in Waterbury. This meeting included discussion of future programs and growth and was accompanied by a tour of the Torrington facilities and an open meeting with a large number of interested persons from the campus and community.

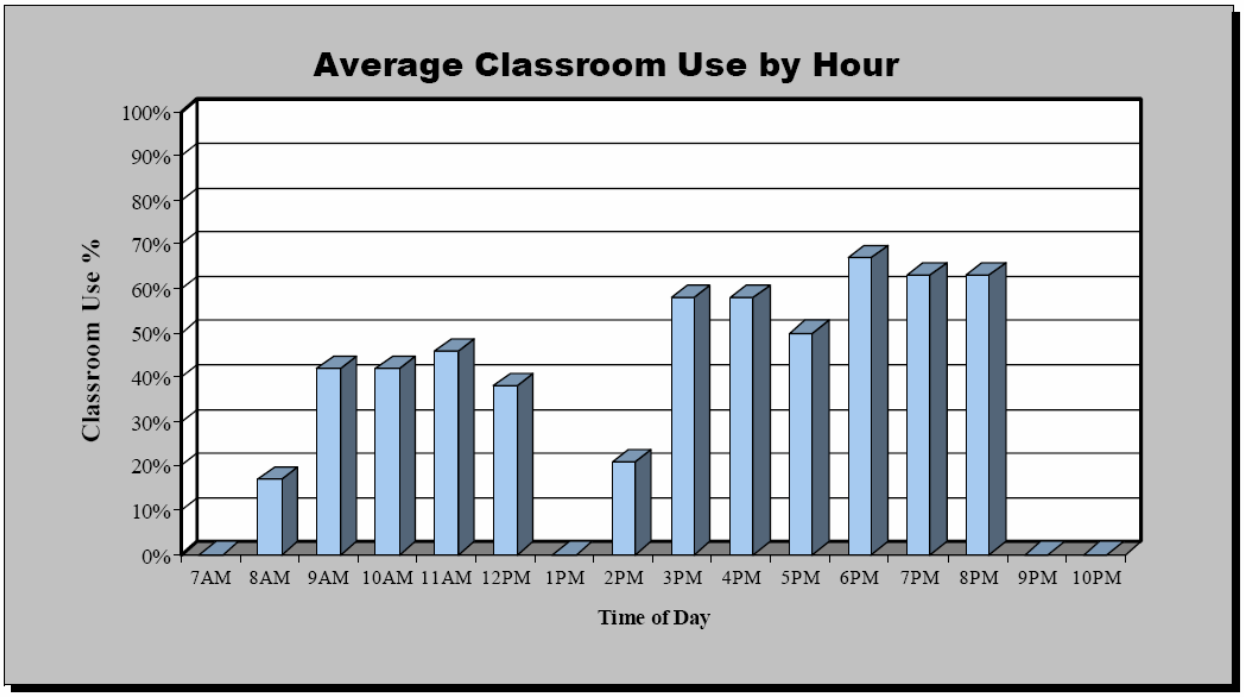
An on-site meeting in April 2004 presented the findings contained in this study.

4.0 UTILIZATION OF EXISTING CLASSROOMS & TEACHING LABORATORIES

Classroom utilization at Torrington for Fall 2003 varied widely by room. The six classrooms were utilized an average of 26 hours per week at 52% student station occupancy. The classroom with the highest scheduled use was room 101 with 45 weekly hours at 68%

student station occupancy. Three others achieved between 24 and 31 weekly room hours. Two of the six classrooms have relatively low use. Room 103B had 18 weekly hours at 40% student station occupancy and room 104 had 10 hours at 28% student station occupancy. UConn administrators in Torrington should take a look at what issues are surrounding the lower use of these rooms. For planning purposes, the consultants used 30 hours per week at 65% student station occupancy as a target.

By time of day the utilization of classrooms is strongest from 3:00 PM to 9:00 PM. There is a strong Saturday morning program with four classrooms in use all morning through the early afternoon. There was no scheduled Friday usage of the classrooms during Fall 2003. The graphs and the table which follow show the classroom use by time of day and for each day of the week.



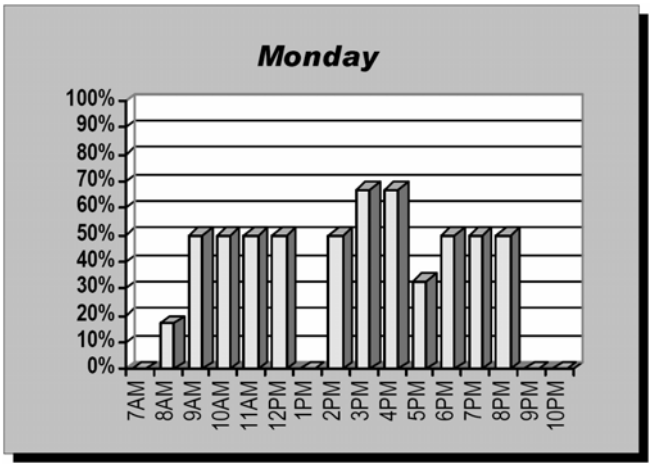
NOTE: Average of Monday through Thursday use.

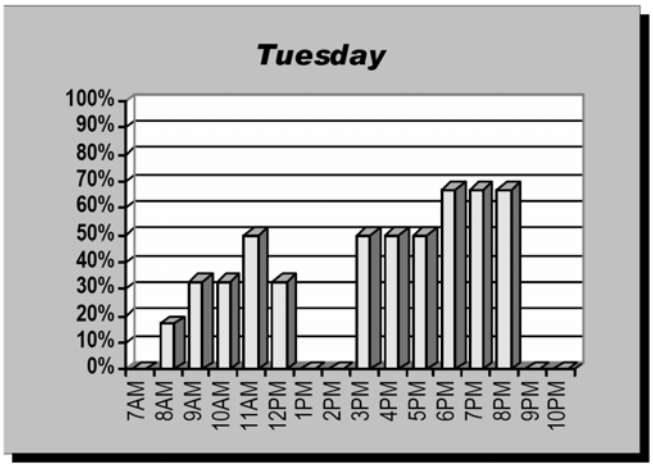
University of Connecticut - Torrington

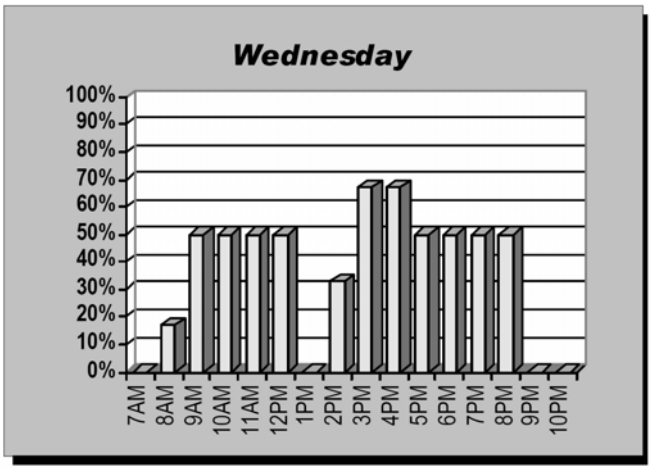
Time of Day	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Average*	
	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use	Rooms in Use	% In Use
7:00 AM	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
8:00 AM	1	17%	1	17%	1	17%	1	17%	0	0%	4	67%	0	0%	1	17%
9:00 AM	3	50%	2	33%	3	50%	2	33%	0	0%	4	67%	0	0%	3	42%
10:00 AM	3	50%	2	33%	3	50%	2	33%	0	0%	4	67%	0	0%	3	42%
11:00 AM	3	50%	3	50%	3	50%	2	33%	0	0%	4	67%	0	0%	3	46%
12:00 PM	3	50%	2	33%	3	50%	1	17%	0	0%	4	67%	0	0%	2	38%
1:00 PM	0	0%	0	0%	0	0%	0	0%	0	0%	4	67%	0	0%	0	0%
2:00 PM	3	50%	0	0%	2	33%	0	0%	0	0%	0	0%	0	0%	1	21%
3:00 PM	4	67%	3	50%	4	67%	3	50%	0	0%	0	0%	0	0%	4	58%
4:00 PM	4	67%	3	50%	4	67%	3	50%	0	0%	0	0%	0	0%	4	58%
5:00 PM	2	33%	3	50%	3	50%	4	67%	0	0%	0	0%	0	0%	3	50%
6:00 PM	3	50%	4	67%	3	50%	6	100%	0	0%	0	0%	0	0%	4	67%
7:00 PM	3	50%	4	67%	3	50%	5	83%	0	0%	0	0%	0	0%	4	63%
8:00 PM	3	50%	4	67%	3	50%	5	83%	0	0%	0	0%	0	0%	4	63%
9:00 PM	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
10:00 PM	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

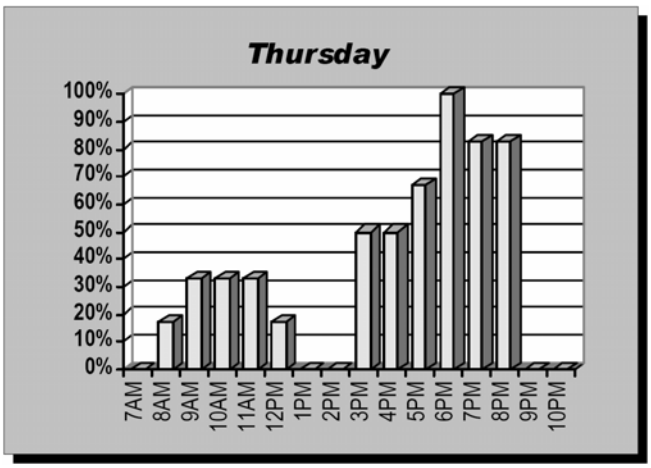
Note: Based on total classrooms of 6

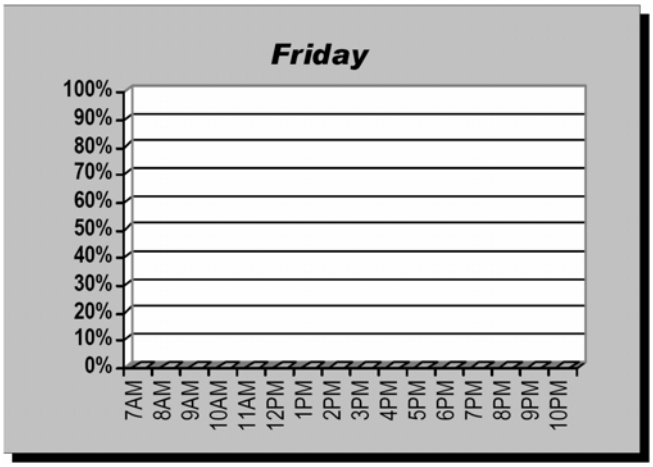
* Based upon the consultant's experience, Friday is typically underutilized, therefore the average is calculated on Monday thru Thursday use.

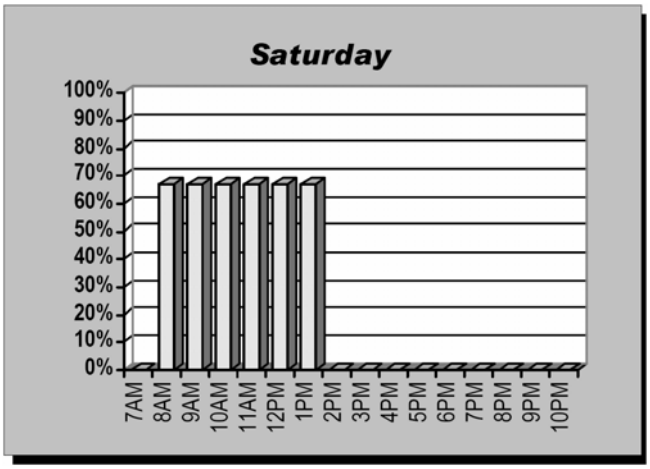












Only two of the four teaching labs had scheduled use in Fall 2003. Room 108 had six hours at 53% student station occupancy and room 109 had three hours at 100% student station occupancy. Rooms 106 and 107 showed no scheduled use. No art classes were taught in the Fall of 2003 as the faculty member was on sabbatical. When the consultants visited, the room was not set up for art instruction. Normally, two to three classes would be taught in the Art Lab per semester with an enrollment limit of 15 students. For Fall 2002, both a Studio Concepts and a Drawing I class were offered for a total use of 12 hours per week.

A physics weights and measures dry laboratory (used for Introductory Astronomy in the base term) is expected to continue. The Fall 2003 class had 27 enrolled. Further analysis of whether that is a good class size or whether a better lab with 24 stations might be more desirable for the future should be done. As noted in the report, the biology and chemistry wet labs have been moved to Northwest Connecticut Community College and are expected to remain there. The Torrington Campus is converting the former wet laboratories to classrooms. One of those two rooms showed utilization for the lecture part of one of the biology courses where the lab portion has moved to the community college.

A CSE course in logic design shows at the same time and day as the Introductory Astronomy course, which produces both lecture and the laboratory requirement for that room.

The teaching laboratory scheduled use is very low. The average weekly scheduled use for the two labs which saw use was under five hours per laboratory. The consultants would normally expect campuswide average use of at least 12 to 15 hours. The consultants note that 20 hours at 75% student station occupancy is the lowest widely used planning goal for teaching laboratories. Because of the low utilization, day-by-day graphs are not shown in this report.

5.0 BASE AND PROJECTED YEAR ENROLLMENTS

Over the 10 year span to the target year for this analysis of space needs, the University of Connecticut anticipates modest growth in Torrington Campus student enrollment, and minor growth in faculty and staffing. The consultants were provided with detailed enrollment data. Enrollment growth at the Torrington campus is projected at 7% for Fall 2004, 5% for Fall 2005, and 9% for Fall 2006. From Fall 2006 through Fall 2013, student enrollments are projected to be stable. The following table exhibits enrollment and staffing projections.

University of Connecticut - Torrington Campus
Actual and Projected Enrollments & Staffing from Fall 2003 to Fall 2013

Enrollment

Campus/College	Total Headcount Enrollment Fall 03	Total FTE - Fall 2003	Ratio FTE/HC	Fall 2004 - 7% Growth HC Enrollment	Fall 2005 - 5% Growth HC Enrollment	Fall 2006 - 9% Growth HC Enrollment	Fall 2007-2013 - Stable HC Enrollment	Fall 2013 FTE Projection
Torrington Campus	377	226	0.60	403	424	462	462	277

Staffing

Campus/College	Full-time Faculty 2003	Part Time Faculty Fall 2003	Non-Faculty Staff Fall 2003	Total Faculty and Staff 2003	Full-time Faculty 2013	Part Time Faculty Fall 2103	Non-Faculty Staff Fall 2013	Total Faculty and Staff 2013
Torrington Campus	5	33	20	58	6	37	23	66

In analyzing the growth of the campus, the overall projection in enrollment was from the Fall 2003 student headcount of 377 (226 FTE) to a projected student headcount 462 (277 FTE) for the Fall 2013 term, an increase of 23% percent over the planning period. Between Fall 1998 and 2003, student enrollment has increased 24%. There was no attempt to differentiate between undergraduate and graduate enrollments since the campus focuses mainly on undergraduate courses. These enrollment assumptions were used to drive the target year analysis.

Staffing levels will increase slightly over the planning period. Full and part time faculty growth was based on the change in student FTE growth. The consultants assumed faculty growth based on maintaining the current faculty to student ratio with no change in the full-time to part-time faculty percentages. Staff growth was projected at approximately 50% of the student growth percentage.

Justification of target year enrollment growth includes the recent addition of bachelor's degrees in Business & Technology and Urban & Community Studies. Partnerships with the Torrington Public School System and the Northwest Connecticut Community College,

combined with plans to receive courses from the main campus in Storrs via distance education technology, are expected to expand both daytime and evening offerings.

6.0 SUMMARY OF SPACE NEEDS

The space needs analysis for the Torrington Campus included a determination of the amount of current and future physical space needed. The space needs analysis found the Torrington Campus to have an overall space deficit of 2,436 assignable square feet (ASF) when comparing guidelines with actual space. When compared to target year guidelines, the deficit is projected to increase to 5,498 ASF by the year 2013. Space needs analysis for the Torrington Campus is summarized in the following table, which organizes space into three broad categories: Academic Space, Academic Support Space, and Auxiliary Space. Physical Education and Recreation as well as Residence Life categories, were not applicable to this campus.

UNIVERSITY OF CONNECTICUT • TORRINGTON CAMPUS

Space Needs Analysis

	Fall 2003 Base Year *Student FTE = 226*				2013 Target Year *Student FTE = 277*			
SPACE CATEGORY	**Existing ASF**	**Guideline ASF**	**Surplus/ (Deficit)**	**Percent Surplus/ (Deficit)**	**Existing ASF**	**Guideline ASF**	**Surplus/ (Deficit)**	**Percent Surplus/ (Deficit)**
Academic Space								
Classroom & Service	5,226	3,226	2,000	38%	5,226	3,953	1,273	24%
Teaching Laboratories & Service	2,672	3,340	(668)	(25%)	2,672	3,340	(668)	(25%)
Open Laboratories & Service	286	452	(166)	(58%)	286	554	(268)	(94%)
Offices & Service	4,256	4,515	(259)	(6%)	4,256	5,015	(759)	(18%)
Other Departmental Space	172	339	(167)	(97%)	172	416	(244)	(142%)
Academic Space Subtotal	*12,612*	*11,872*	*740*	*6%*	*12,612*	*13,277*	*(665)*	*(5%)*
Academic Support Space								
Library	3,877	3,081	796	21%	3,877	3,869	9	0%
Assembly & Exhibit	2,736	5,600	(2,864)	(105%)	2,736	5,600	(2,864)	(105%)
Physical Plant	186	435	(249)	(134%)	186	538	(352)	(189%)
Academic Support Space Subtotal	*6,799*	*9,116*	*(2,317)*	*(34%)*	*6,799*	*10,007*	*(3,208)*	*(47%)*
Auxiliary Space								
Student Union	2,533	3,393	(860)	(34%)	2,533	4,158	(1,625)	(64%)
INSTITUTION TOTAL	**21,944**	**24,380**	**(2,436)**	**(11%)**	**21,944**	**27,442**	**(5,498)**	**(25%)**

ASF = Assignable Square Feet

6.1 BASE YEAR – FALL 2003

At Fall 2003 enrollment and staffing levels, the University of Connecticut – Torrington Campus showed an overall need for an additional 2,436 ASF. The greatest need is in the Assembly & Exhibit and the Teaching Laboratories & Service categories. This is a 11% deficit in square footage when comparing guideline assignable square feet to existing assignable square feet at the campus. Assignable square footage is defined as the usable space inside classrooms,

laboratories, offices, etc. It does not include circulation and building service space or the thickness of walls. For most types of space, gross square footage is 25% to 40% more than assignable square feet.

The Academic Space categories showed a surplus of 740 ASF compared to existing space. Academic Support Space categories showed a deficit of 2,317 ASF while Auxiliary Space produced a deficit of 860 ASF.

6.2 TARGET YEAR – FALL 2013

At projected target year enrollment and staffing levels, the Torrington Campus showed a campuswide need for 27,442 ASF. This is a 5,498 ASF deficit or 25% increase over the amount of existing space at the target year. The greatest deficits can be found in Assembly & Exhibit, Student Union, and Offices and Service.

7.0 SPACE NEEDS AND GUIDELINE APPLICATION

This section summarizes the current and projected space needs by functional space category. The Fall 2003 course files, along with the facility inventory files and staffing data were assembled by the consultants for use in projecting base and target year space needs. When appropriate, the consultants used standards established by the Council of Educational Facilities Planners, International (CEFPI) and supplemented with space standards used in previous work of Paulien & Associates, Inc. The specifics for each space type are discussed in the following sections.

7.1 CLASSROOM GUIDELINE APPLICATION AND SPACE NEEDS

Classrooms are defined as any room generally used for scheduled instruction requiring no special equipment and referred to as general purpose classroom, seminar room, or lecture hall. Classroom service space directly supports one or more classrooms as an extension of the classroom activities, providing media space, preparation areas, or storage. The classroom station size is considered as including the classroom service area space, however, additional service space can be justified on a program or classroom basis.

From the consultants' experience, a classroom utilization goal of 30 hours of use per week at 65% student station occupancy for lecture courses was specified. A guideline of 20 ASF was used as the average classroom station size. Classroom space requirements were determined by a formula which takes the target utilization of 30 hours per week, multiplies it by the average student occupancy target of 65%, and divides the result into the 20 ASF per student station. This calculation produces a guideline of 1.03 ASF per weekly student contact hour (WSCH) for classrooms.

The example below illustrates how the guideline is used to calculate guideline square footage for classrooms.

Classroom Guideline Application Example

Step 1 Space per Student Station (20 ASF)

Weekly room use target (30 hours) x Average student station occupancy (65%) = 19.5
= (1.03) Assignable square feet per weekly student contact hour

Step 2

Enrollment (20) x Weekly room hours (3) = Weekly student contact hours (60)

Step 3

Weekly student contact hours (60) x ASF/WSCH (1.03) = Guideline square footage (61.8)

Guideline application for the University of Connecticut – Torrington Campus classroom space for the base year shows a surplus of 2,000 ASF of classroom space over existing space. The surplus at base year is a result of recent changes in the curriculum. Being in a rural part of the state, the UConn Torrington Campus is dependent upon well water and septic systems. To prevent the possibility of chemical pollution to groundwater, the campus has shut down the biology and chemistry labs. At the time of this analysis, these labs were undergoing renovation into classrooms. The consultants' base year facilities inventory reflects these changes, creating a surplus of classroom space.

For the target year the space analysis indicates a surplus of 1,273 ASF of classroom and service space. Given this surplus of classroom space, the consultants recommend considering converting a classroom(s) into other types of spaces, such as a computer lab, offices, or gallery space.

7.2 TEACHING LABORATORY GUIDELINE APPLICATION AND SPACE NEEDS

Teaching Laboratories are defined as rooms used primarily by regularly scheduled classes that require special purpose equipment to serve the needs of particular disciplines for group instruction, participation, observation, experimentation, or practice. Station sizes in teaching laboratories vary by discipline. The CEFPI space per student station guideline has approximately 50 different subject areas for which it provides teaching laboratory modules. In all cases, these are expressed as a range. The consultants used the low end of the range since these are laboratories for introductory courses.

There are not enough scheduled laboratory weekly student contact hours to justify even one complete laboratory with normal scheduling expectations. Yet laboratory instruction exists in two disparate disciplines. The consultants produced the guideline needs by using the projected class sizes to be taught in each lab and multiplying by the recommended student station sizes for that discipline.

The use shown in Fall 2002 would not justify more than one laboratory. However, because the laboratory usage is both in the sciences and in art, at least two laboratories are needed to conduct that work. In addition, there has been a request for a computer teaching laboratory so that a number of courses that have not been offered because such a facility does not exist could be offered. That has been included in the laboratory analysis.

The guideline space per station in each discipline includes service space for laboratories and takes into account the need for enough space for new paradigms in teaching methodology requiring collaborative learning environments such as mediated laboratories. The guideline amount of space per student station used for each discipline at the University of Connecticut – Torrington Campus is listed in the table below.

UNIVERSITY OF CONNECTICUT • TORRINGTON CAMPUS

Teaching Laboratory Space Analysis

	ASF per Student Station	No. of Student Stations	Guideline ASF	Existing ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
Art	60	15	900	1,003	103	10%
Computer Lab	35	24	840	0	(840)	n/a
Dry Science Lab	50	32	1,600	1,669	69	4%
TOTAL			**3,340**	**2,672**	**(668)**	**(25%)**

ASF = Assignable Square Feet

Guideline application for the Torrington Campus teaching laboratory space for base year shows a need for 3,340 ASF of space, a deficit of 668 ASF. The target year teaching laboratory space needs analysis shows the same deficit of 668 ASF because the consultants concluded that the existing laboratories can accommodate the target enrollment. The guideline reflects the addition of a computer teaching lab for 24 students and the upgrade of the dry science laboratory to current standards. While no art laboratory courses were scheduled in Fall 2003 due to faculty sabbatical, the lab will be utilized for art courses. As explained in Section 5.1 – Classroom Guideline Application and Space Needs, the biology and chemistry labs were not included in the analysis. The lab portions of these classes are being offered at Northwest Connecticut Community College. There are no plans to bring these class sections back to the current UConn Torrington facility.

7.3 OPEN LABORATORY GUIDELINE APPLICATION AND SPACE NEEDS

The category of open laboratory space consists of rooms that are open for student use and are not used on a regularly scheduled basis. These rooms provide equipment to serve the needs of particular disciplines for group instruction in informally or irregularly scheduled classes. Alternatively, these rooms are used for individual student experimentation, observation, or practice in a particular field of study. The size of these laboratories is based on

equipment size and/or on the station size and student count desired and should be determined on an individual basis.

The types of rooms usually included in this category are open-access computer laboratories, language laboratories, music practice rooms, and tutoring and testing facilities.

In recent benchmarking and consulting work with several statewide systems, the consultants found between five and 10 square feet per full-time equivalent student allocated for space in this category. The consultants believe that a reasonable guideline for the Torrington Campus open laboratory space is two square feet per full-time equivalent student. This is a number lower than the benchmark ranges yet greater than the amount of space the campus currently provides in this category.

At the Torrington Campus, a small 10 station open computer lab with a helpdesk office is currently serving student needs. The consultants noticed that the space was crowded and filled to capacity during the site visit. Base year open laboratory space needs analysis show a deficit of 166 ASF. At the target year open laboratory needs show the deficit increases to 268 ASF.

7.4 RESEARCH LABORATORY GUIDELINE APPLICATION AND SPACE NEEDS

While the programmatic focus of the Torrington Campus is "addressing human and community needs through teaching, research, and outreach" the Tri-Campus administration did not identify a need for dedicated research laboratory space.

7.5 OFFICE AND SERVICE GUIDELINE APPLICATION AND SPACE NEEDS

For this analysis, offices used to conduct administrative or academic activities are categorized as office and service space. Office space guidelines are based on CEFPI standards. The CEFPI guideline determines office space needs based on major categories of staff and application of space amounts for office service and conference space needs. The University of Connecticut-Torrington Campus provided staffing information at base year for each category of staff. Target year full-time and part-time faculty headcounts were based on projected increases in programmatic offerings. The consultants then applied appropriate guidelines to each major category. The amount of office space allotted to each position is based on the status and duties of the employee as noted in the Office Space Guideline Application Table.

Office Space Guideline Application

STAFFING TYPE	Office Guideline ASF per Headcount	Fall 2003 Base Year Head-count	Fall 2003 Base Year Total Guideline ASF	Fall 2003 Base Year Existing ASF	2013 Target Year Head-count	2013 Target Year Total Guideline ASF	2013 Target Year Existing ASF
Campus Director	200	1	200		1	200	
Faculty	140	5	700		6	840	
Faculty - Part Time	35	33	1,155		37	1,295	
Asst. Dean of Students	140	1	140		1	140	
Registrar/Bursar	140	1	140		1	140	
Professional Staff	120	6	720		7	840	
Library Personnel *(included in Library Gdlns)*	0	2	0		3	0	
Technical Support	70	2	140		2	140	
Clerical Support	110	2	220		2	220	
Student Workers	40	2	80		2	80	
Maintenance Head	140	1	140		1	140	
Custodial	0	2	0		3	0	
Total Office Space			**3,635**	**3,536**		**4,035**	**3,536**
Total Service Space			*510*	*360*		*570*	*360*
Total Conference Room Space			*370*	*360*		*410*	*360*
TOTAL		**58**	**4,515**	**4,256**	**66**	**5,015**	**4,256**
Surplus/(Deficit)			***(259)***			***(759)***	

ASF = Assignable Square Feet

At base year, the guideline analysis showed slight deficit of 259 ASF in the academic office space category. Reasons for the small deficit in the base year are the conversion of the chemistry and biology laboratory preparation spaces into faculty offices and the conversion of several offices for the study/writing center. At the target year the deficit in this category increased to 759 ASF. The largest need at target year will be for "open office" areas where part-time faculty can meet with students and access email and voicemail systems.

The consultants assumed that adjunct faculty would be housed four to an office. An alternative could be an Adjunct Resource Center where computers, meeting space, mail, copying and supplies are available on an as needed basis. Such an approach could house the target adjunct population in slightly less space but it suggests having a student worker available to staff the Center during key class times.

7.6 OTHER DEPARTMENT SPACE NEEDS

The space classified as other department space includes all other space assigned to an academic department that has not been included in the previous categories of classrooms, teaching laboratories, open laboratories, or offices. These areas consist of a variety of spaces. They can include departmental study rooms, greenhouses, animal facilities, and lounges. Due to the diversity of these spaces and the different ways various campuses might classify these spaces, these spaces are not specifically addressed by published sources. In recent

benchmarking studies, the consultants found other academic department space to be a wide range between one and 18 square feet per full-time equivalent student.

Other department space at the Torrington Campus is almost nonexistent at base year. In the original building design, a 172 ASF greenhouse was attached to the Bacteriology-Botany Lab. Over the years, the Botany lab was converted into an Art lab, eliminating the need for the greenhouse. The consultants believe that a reasonable guideline for this campus is 1.5 ASF per student FTE in this category due to the organizational structure of few academic departments.

At the base year, guideline application shows a space deficit of 167 ASF. At the target year this deficit increases to 244 ASF as a small increase in faculty may necessitate the need for a faculty lounge or similar type of space. Normally the Faculty Lounge would be placed into this category. However, at the Torrington campus, this space was being used as a campuswide conference room and therefore placed in the Office & Service Category.

7.7 LIBRARY GUIDELINE APPLICATION AND SPACE NEEDS

Most of the guideline systems for library space utilize one set of factors for collections, another for readers, and a third for service space. This approach was used by the consultants.

The library analysis is based on collections data reported by the Torrington Campus librarian and shared with the consultants. The guideline applied assumes that 0.10 ASF per volume is used for the collection space in the Julia Brooker Thompson Library, located within the Torrington Classroom Building.

Until recently the reader space calculations for commuter campuses have generally been based on seating for 20% of the student body. Because many students now do research electronically from non-library locations this percentage of students has begun to lower. The consultants chose to apply a 15% factor to undergraduate headcount and 10% to the total full-time equivalent faculty. Given the small number of faculty FTE, the guideline does generate only one study space for faculty.

The consultants believe the 25 square feet per reader station recommended by CEFPI is not adequate because of increasing use of electronic library carrels. The 25 ASF per reader station was used for regular study stations but 35 ASF per station was used for electronic study stations. For the Julia Brooker Thompson Library, 30% of the stations were considered as electronic seats for this analysis. This is due to the large number of students who will use electronic stations to access on-line serials and other electronic information via the Main Campus Library in Storrs.

While the CEFPI suggests 25% of the total collection and reader station space for service and staff space, the consultants, based on recent library association recommendations, used 12.5% for the Julia Brooker Thompson Library. Lounge space is allotted at three assignable square feet per study station. The Library Guideline Application is outlined in the following table.

Overall library space needs analysis at the base year shows a surplus of 796 ASF. At the target year, a surplus of nine ASF is noted. The consultants noticed that the upper floor of the Library was also being used for storage of furniture and other items.

UNIVERSITY OF CONNECTICUT • TORRINGTON CAMPUS

Library Guideline Application

							Fall 2003 Base Year	2013 Target Year
VOLUME GENERATION	**Current Items**	**Conversion Factor**	**Fall 2003 Volumes**	**Volume Growth**	**2013 Volumes**			
Books/Serials (Volumes)	16,064	1.00	16,064	28%	20,628			
Unbound Serials (Display)	76	0.50	152	28%	195			
Audio/Visual Materials	678	5.00	136	170%	367			
						TOTAL VOLUMES	**16,352**	**21,190**
	No. of Volumes							
COLLECTION SPACE	**0 - 150,000**	**150,001 - 300,000**	**300,001 - 600,000**	**600,001 - 4,500,000**	**4,500,001 and above**			
ASF per Volume	*0.100*	*0.090*	*0.080*	*0.070*	*0.035*			
Fall 2003 Collection Space	1,635	0	0	0	0			
2013 Collection Space	2,119	0	0	0	0			
						TOTAL COLLECTION SPACE	1,635	2,119
STUDY SPACE	**Percent of FTE**	**Fall 2003 FTE**	**Fall 2003 Stations**	**2013 FTE**	**2013 Stations**			
Students	15%	226	34	277	42			
FT Faculty (Headcount)	20%	5	1	6	1			
	Total Study Stations		**35**		**43**			
Regular Study Stations	*70% @ 25 ASF/Station*		625		750			
Electronic Study Stations	*30% @ 35 ASF/Station*		385		455			
						TOTAL STUDY SPACE	1,010	1,205
						TOTAL COLLECTION & STUDY SPACE	**2,645**	**3,324**
						Service Space *(12.5% of Total Collection and Study Space)*	331	416
						Lounge Space *(3 ASF per Study Station)*	105	129
						TOTAL LIBRARY SPACE	**3,081**	**3,869**

ASF = Assignable Square Feet

7.8 ASSEMBLY & EXHIBIT GUIDELINE APPLICATION AND SPACE NEEDS

Assembly space is defined as any room designed and equipped for the gathering of large numbers of people. This includes theaters, auditoriums, meeting rooms, arenas, and chapels. Exhibit spaces are used for exhibition of materials, works of art, or artifacts intended for general use by students and the public. The large lecture hall next to the main entrance of the Torrington Classroom Building was coded as Assembly & Exhibit space for this report.

For this category of space CEFPI has four options. Only the basic core requirement recommended for all small campuses is used. It provides 5,600 ASF as a minimum assembly and exhibit core requirement. Application of guidelines at the base and target years shows a deficit of 2,864 ASF in the assembly and exhibit category. This guideline generates space for a multi-purpose meeting room for drama and community lectures, and gallery space for a possible permanent John Brown exhibit and for changing exhibits, needed spaces for community engagement.

7.9 PHYSICAL PLANT GUIDELINE APPLICATION AND SPACE NEEDS

Most guidelines suggest a percentage of from seven to eight percent of all square footage on campus, with the exception of existing physical plant space, be used to drive master plan needs in this category. The consultants have found in most cases that this percentage generates greater amounts of space then typically exists on campus. Many physical plant departments are increasing the outsourcing of many typical shop functions and using just-in-time purchasing methods to decrease warehousing needs.

From previous studies, the consultants have found that the average percentage used to drive physical plant space is approximately four to six percent. The consultants have applied only two percent of all square footage on campus to drive the base and target year needs for space in this category at the Torrington Campus. The base year guideline analysis shows a small deficit of 249 ASF. At the target year, the deficit increases to 352 ASF. The current space seems inadequate as spaces designed for general storage and receiving have been converted into a food preparation and student recreation area respectively. Hence, additional storage and workshop space is warranted.

7.10 STUDENT UNION GUIDELINE APPLICATION AND SPACE NEEDS

CEFPI recommends a formula of nine square feet per student and the Association of College Unions International (ACUI) recommends a formula of 10 square feet per student for each graduate and undergraduate student for generating student union space. These guidelines for space application provide space for the various functions and the room use code designations that are typically found in a comprehensive student union including bookstore, food service, lounge, meeting space, student government/club space, and other student service

type space categories. This formula has been applied by the consultants using nine assignable square feet per student headcount for student union space at the Torrington Campus.

Student union space at the Torrington campus consists of a television lounge and a snack bar/informal dining area. Part of the area was converted into a serving line for sandwiches and drinks, replacing a vending system. In addition, the area also serves as a major corridor and entrance to the bookstore.

At the base year the application of space guidelines shows a deficit of 860 ASF. At the target year, the deficit increases to 1,625 ASF.

7.11 RESIDENCE LIFE

The University of Connecticut – Torrington Campus has no student housing and does not anticipate construction of student housing during the 10 year facilities planning timeframe.

8.0 LIMITATIONS OF ANALYSIS

The consultants utilized campus data provided by the University of Connecticut – Torrington Campus for staffing, courses, and facilities information. Fall 2003 data were used for the base year. Target year data was provided in February 2004 and included input from both Tri-Campus administration and the UConn central administration.

Space needs analysis for the purpose of master planning is a process through which estimates are made of space amounts likely to be needed by various units of an institution at current and projected enrollment, staffing, and activity levels. Based on the enrollment assumption and data provided by campus representatives, findings at the campus level can be considered to be reliable estimates of space needs. While the application of normative guidelines is a good general indicator of relative need, they are not a substitute for facilities programming. Refinement of space needs can be done at the program level. Programming will most accurately determine specific needs and building fit. Further, this study analyzed space needs but did not evaluate the quality of existing space.