BACKGROUND
This report contains utilization data for University of Minnesota Twin Cities general purpose classrooms for Fall semester 2000 and Spring semester 2001. It is produced by the Office of Classroom Management (OCM) and is part of an effort to develop comprehensive utilization data regarding a critical resource that directly supports the University’s teaching and learning mission.

KEY DEFINITIONS
General purpose classrooms – classrooms designed to meet the teaching and learning needs of a broad range of academic programs and to support the entire university community. Also called “central classrooms” or “centrally-scheduled classrooms”. These spaces are centrally managed and funded. This report covers general purpose classroom utilization.

Departmental Classrooms – classrooms that are designed to meet the specific and more specialized academic needs of a given department or program. These spaces are departmentally managed and funded. This report does not cover departmental classroom utilization.

Classroom Utilization consists of two numbers:
- Time Utilization - defined as total hours used divided by the total hours for the reporting period, expressed as a percentage. This is a measure of when the space is used.
- Station Occupancy - defined as the percentage of seats occupied in the room when the room is in use. This is a measure of efficiency in using the maximum design capacity of the space.
  - Projected Station Occupancy: occupancy based on the projected enrollment defined by the department when the course is submitted for scheduling. Because scheduling occurs approximately ten months in advance of the semester, room scheduling and assignments are based on this number. This is a measure of how efficiently Scheduling makes room assignments.
  - Actual Station Occupancy: occupancy as determined by the actual enrollment in the course. This number is not known until after registration and after room scheduling and assignments have been made. This is a measure of how accurately the department projects its enrollment and courses, and how efficiently space is actually used.

BASELINE
The “University of Minnesota – Twin Cities Campus Classroom Study” published in 1995, documented a performance baseline for basic utilization of centrally scheduled classrooms. This baseline data for Fall quarter 1994 was Time Utilization: 51% and Station Occupancy: 48.5%.
BENCHMARK/PERFORMANCE MEASURES

There is no set national standard for classroom utilization. The “University of Minnesota – Twin Cities Campus Classroom Study” recommended goals of 71% Time Utilization and 65% Station Occupancy, based on the 8am – 5pm, 45-hour week. At the University of Minnesota, Provost approved scheduling policy for the Twin Cities campus sets minimum utilization for the 8am – 5pm, 45-hour week, at 67% Time Utilization and 60% Station Occupancy.

FINDINGS

Table 1 and chart 1 for each semester provide the basic utilization data. This data covers the DAY period, defined as 8am – 5pm. Basic Utilization data for Twin Cities General Purpose Classrooms:

FALL 2000
TIME UTILIZATION: 60%
STATION OCCUPANCY: 66% (projected) 53% (actual)

SPRING 2001
TIME UTILIZATION: 59%
STATION OCCUPANCY: 70% (projected) 52% (actual)

Additional tables and charts break utilization out by individual campus and by time of day (Peak Time 9am – 2pm and Day + Evening 8am – 10 pm).

COMMENTS AND NOTES

TRENDS

The trend for time utilization is down, to 60% in Fall 2000, and to 59% in Spring 01. This is primarily due to the increasing numbers of sections scheduled at non-standard times. A detailed discussion of the non-standard class time issue is contained in the “Twin Cities Classroom Supply, Demand and Utilization Issues” briefing that is being published by OCM in conjunction with this report.

SEAT OCCUPANCY ISSUES

For the first time, this report also tracks projected versus actual seat occupancy. In the assignment of classrooms, the scheduling system necessarily works on the basis of the projected enrollment numbers for each section that are supplied by the department. Actual student registrations may differ from this projection, causing actual seat occupancy to also differ. (Please see the actual and projected enrollment definitions above). Note that differences in projected versus actual enrollment do not effect when the classroom is in use (time utilization), only how many of the seats in the classroom are in use (seat occupancy).

In Fall 2000, projected seat occupancy was 66%, and actual seat occupancy was 53%. Spring 01 projected seat occupancy was 70% and actual was 52%. This indicates that departments significantly overstated projected enrollment, resulting in the placement of classes in rooms that were larger than required.
Another factor contributing to smaller classes in larger classrooms is the lack of adequate technology infrastructure in smaller rooms. The “General Purpose Classroom Technology Upgrade Plan” that is currently being implemented will remedy this as more classrooms become equipped as “projection-capable classrooms.”

In order to assist departments in fine-tuning projected enrollment and to help Classroom Management improve the accuracy and efficiency of scheduling, this report provides the projected and actual enrollment data for Fall 00 and Spring 01 courses that have enrollment differences of greater than plus or minus 10%.

**INCREASED DEMAND FOR CLASSROOMS**

While the impacts of semester conversion on classroom scheduling and utilization have stabilized, we continue to operate under significantly higher demand than in the past. During the last quarter under the old system, we scheduled 10,100 sections. With semester conversion in Fall 99, that number jumped to 12,221 sections. The number peaked at 14,553 in Spring 00, and has subsequently settled in at approximately 14,000 sections each semester.

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<th>Section Growth</th>
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**CONSTRUCTION/RENOVATION IMPACT**

The classroom inventory base continues in a period of constant flux because of renovation and construction. The movement of buildings on and off line obviously impacts classroom inventory. It also impacts the distribution patterns of courses as the OCM schedulers attempt to satisfy requests to maintain room assignments in general proximity to departmental/faculty office locations. This turbulence in the number and location of classrooms will continue into the foreseeable future.
UNPLACED COURSES
As a result of construction and increased demand, the University has faced an unprecedented shortage of classrooms prior to the start of each semester since conversion. These classroom shortages have been resolved at the very last minute through a series of extraordinary management actions by colleges, departments and Classroom Management. These actions have included assigning classes to substandard classrooms, using classrooms in locations distant from the teaching department, resorting to temporary excess seating, pushing small classes and seminars into departmental conference rooms, and aggressively canceling under-enrolled courses.

Scheduling demand is highest, and the unplaced course problem is most acute, during the “prime time” teaching hours of 9am to 2pm. Those departments that exceed the scheduling policy guideline that states that no more than 60% of their course offerings should be in the prime time period exacerbate the problem.

One of the most significant factors that influences classroom utilization and scheduling efficiency is the degree of adherence to the Senate prescribed standard teaching hours scheme. Teaching at non-standard times contributes to the classroom shortage problem, directly reduces room utilization, reduces classroom availability, increases costs and makes it harder for students to register for courses. Deviation from the standard teaching time scheme is a major contributing factor in reducing classroom utilization.

OCM’s separately produced Classroom Supply, Demand and Utilization Report is a logical companion to this document. It notes that the unplaced course problem is an indicator of an impending critical issue for the university that necessitates our immediate focus on both the peak time 60/40% issue and on the scheduling at non-standard time issue. OCM will work with colleges and departments to help reduce the impacts of these factors.

Classroom Management will continue to refine these reports, and will produce general purpose classroom utilization reports covering every semester. It is anticipated that future reports will contain additional analytical information that will help the University community to be informed about classroom issues and activity. These reports will also help us better manage the U’s precious classroom resources.
Additional information on classrooms is available on the Office of Classroom Management website, [www.classroom.umn.edu](http://www.classroom.umn.edu). Feedback on any classroom issue is always welcome. Please send it by email to classrm@tc.umn.edu.