

Appendix G

Capacity Calculations

School capacity is defined by the State of Maryland as the maximum number of students that can reasonably be accommodated in a facility without significantly hampering delivery of the given educational program. School capacity is the product of the number of teaching stations at a school and the average class size for each program (based generally on the student-to-teacher ratio). The state of Maryland and MCPS rate capacities using slightly different student-to-teacher ratios.

MCPS Program Capacity

Class size for regular and supplemental programs, such as English for Speakers of Other Languages (ESOL), is based on MCPS policy, regulation, and budget guidelines. Many jurisdictions in Maryland, including Montgomery County, strive to reduce class sizes. State and federal regulations mandate a maximum class size limit for preschool programs.

The current standard student-to-classroom ratios used to calculate school capacities as stated in the Board of Education Long-range Educational Facilities Regulation (FAA-RA) are as follows:

Head Start and prekindergarten—2 sessions	40:1
Head Start and prekindergarten—1 session	20:1
Grade K—full-day	22:1
Grade K—reduced class size full-day	18:1
Grades 1–2—reduced class size	18:1
Grades 1–5/6 Elementary	23:1
Grades 6–8 Middle	25:1*
Grades 9–12 High	25:1**
ESOL (secondary)	15:1

*Program capacity is adjusted at the middle school level to account for scheduling constraints. The regular classroom capacity of 25 is multiplied by .85 to reflect the optimal utilization of a middle school facility (equivalent to 21.25 students per classroom.)

**Program capacity is adjusted at the high school to account for scheduling constraints. The regular classroom capacity of 25 is multiplied by .9 to reflect the optimal utilization of a high school facility (equivalent to 22.5 students per classroom.)

Many schools that appear to have space based on the calculated program capacity often need relocatable classrooms to accommodate the programs operating in the school. There are several explanations for this situation.

- **Staffing Ratio:** Capacity calculations for elementary schools are based on a student-to-classroom ratio of 23:1; however, staffing (student-to-teacher ratio) is not always provided at the same ratio. When the student-to-teacher ratio is less than the student-to-room ratio, the calculated

capacity will not support the number of teachers provided by the staffing ratio in the facility. For example, if staffing is provided at 22:1, and capacity is calculated at 23:1, then for a building with 20 classrooms the capacity would be 460 (20 x 23) students but there would be 21 teachers based on the staffing ratio (460/22 = 20.9), therefore one additional classroom would be needed to accommodate a 22:1 staffing ratio.

- **Combined Staffing:** Some schools are provided additional staffing to meet the needs of students in the school. For example, a school that has a large number of students impacted by poverty may be allocated an additional .5 teaching position to assist students and an additional .5 teaching position for Title 1 services. The school may decide to combine the allocated staff to create an additional classroom teaching position, thereby creating the need for an additional classroom. In this case, the enrollment has not increased and the calculated capacity has not changed, but the need for classrooms has increased.
- **Capping Class Size:** In schools that may have very large class sizes in certain grades, additional staff may be provided to reduce the oversized classes to keep them within Board of Education guidelines. For example, if a school has two second-grade classes each with 28 students and four more students enroll in second grade, adding the additional students to the two large classes would cause the two classes to exceed the maximum class size cap of 28 students. If there was no opportunity to create combination classes with other grades, an additional teacher would be provided, and the school would reorganize with three second-grade classes of 20 students each. The additional teacher could create the need for a relocatable classroom.

Small instructional spaces and specialized classrooms are provided for all schools and are allocated on the basis of enrollment size and the need for supplementary instructional activities, such as remedial reading, special education resource, speech, art, and music.

In situations where the educational program will not be adversely affected, MCPS leases space on an annual basis to appropriate outside organizations. In most cases, these organizations are referred to as “joint occupants” and are usually day-care providers. Before and after school programs also are provided in many MCPS schools. Spaces used by day-care providers on MCPS sites range from shared use of multipurpose rooms before and after school, to relocatable classrooms on a school site that are financed by the provider and operated for the school community. If space is available, one or more classrooms can be leased for full-day programs.

State-rated Capacity

State-rated capacity, used to determine state funding, is calculated using the following calculations. These calculations make MCPS and state capacity ratings differ. See appendix J for a comparison of capacity ratings for all schools.

Head Start and prekindergarten—1 session	20:1
Grade K—full-day	22:1
Grades 1–5/6 Elementary	23:1
Grades 6–12 Secondary	25:1*
Special Education	10:1

*Program capacity differs at the secondary level in that regular classroom capacity in the regular classroom capacity of 25 is multiplied by .85 to reflect the optimal utilization of a secondary school (equivalent to 21.25 students per classroom).