Improving the Calculation of the Capacity of School Facilities

Summary

For use in decision making related to the allocation of state capital dollars to LEAs for school construction only, the IAC staff propose that LEAs and the IAC phase in the use of a new, more detailed, and more accurate "State Facility Capacity (SFC)" measure to represent the student capacity of a K–12 school facility. The state-rated capacity (SRC) calculation and SRC figure would remain the measure of a facility's capacity for purposes of decision making around other issues such as local development.

Context

The capacity of a school facility in terms of the number of students it can serve is a key data point for decision making at both the local and state levels. Local education agencies (LEAs) use capacity figures in the planning and management of their portfolios of school facilities, including for capital planning and budgeting and in assigning students to schools. Some local governments use capacity figures in planning and decision making around housing development. The State uses capacity figures in allocating state capital dollars to LEAs for school construction.

To date, the State and LEAs have generally used the IAC's state-rated capacity (SRC) calculation in many of these processes. The SRC is a measure of student capacity that is uniformly calculated for each school facility by counting the number of spaces that can be used as teaching stations, multiplying them by a standard number of students adopted by the State as being generally suitable for each grade level and program type, and then multiplying the result by 85 percent.[1] Although LEAs may choose to operate classes of various sizes, the IAC adopted in regulation the following class sizes for purposes of calculating the SRC of a facility:[2]

Type of class	Number of students
General Education	
Pre-Kindergarten	20
Kindergarten	22
Grades 1–5	23
Grades 6–12[3]	25
Career/Technology Education, grades 9–12	20
Special education	10

Identified Problem

Both equity and efficiency require that the State consider the need for student capacity in a given facility and community when it allocates state capital dollars to school construction projects. The need or deficit in student capacity (i.e., seats and space within a facility) is a function of the demand for seats

[1] COMAR 23.03.02.04; IAC Administrative Procedures Guide, Appendix 102A. Cooperative-use spaces are not counted in the SRC calculation.

[2] Id.

[3] Secondary-school classrooms include laboratories, career technology rooms, music rooms, art rooms, consumer science rooms, gymnasiums, and auxiliary physical education classrooms. COMAR 23.03.02.04(C)(2).

and space as measured in enrollment (students attending or projected to attend) and the supply of seats and space as measured in student capacity.

Need (Capacity Deficit) = Enrollment – Capacity

To determine the demand, LEAs must consider relatively sophisticated data on community population within the attendance zone of the school and changes thereto, student enrollments and changes thereto, and student characteristics/needs and changes thereto. To determine the supply, LEAs must accurately measure the student capacity of each facility in light of the programs and activities that the LEA needs to deliver in the facility and how the LEA plans to utilize the spaces within the facility.

The SRC calculation is a very blunt tool that produces only a very rough estimate of capacity because 1) LEAs' actual class sizes can differ substantially from the State's yardstick class sizes and 2) the SRC calculation overlooks many student characteristics and program characteristics. The SRC fails to take into account utilization factors including the following:

- The types of programs offered in the facility;
- The many possible schedule designs;
- The varying class sizes that can come with different types of programming, including gifted-and-talented education and some student-support services;
- The many different ways in which LEAs may schedule teachers' planning time;
- How LEAs may schedule student collaboration; and
- Whether or not the school schedules any "floating" teachers into spaces made available during other teachers' non-teaching periods.

Proposed Solution

For use in decision making related to the allocation of state capital dollars to LEAs for school construction only, the IAC staff propose that LEAs and the IAC phase in the use of a new, more detailed, and more accurate "State Facility Capacity (SFC)" measure to represent the student capacity of a K–12 school facility. The SFC is based upon an analysis of the projected utilization of all student-service spaces in a facility, both by seat and over the course of the hours in a typical week of operation. Such an analysis produces a more accurate description of the student capacity of a facility than does the SRC. It will bring the capacity figures used in state-level funding decisions into closer alignment with the actual usage of the spaces within LEAs' facilities. The SRC calculation and SRC figure would remain the measure of a facility's capacity for purposes of decision making around other issues such as local development.

- For existing facilities already in service, the current SRC would be grandfathered and used as the SFC until a major change of use (described below) triggers an SFC recalculation.
- For new, replacement, and renovated or expanded facilities, the original design capacity (intended enrollment) as specified in the facility's construction documents submitted to the IAC would become the facility's initial SFC.
- The LEA or charter school operating the facility would be required to recalculate a facility's SFC upon the occurrence of any of the following major changes of use:
    - A change in the grade levels offered that affects more than 10% of the enrollment;

  - A change in program type (e.g., from CTE to comprehensive high school) that affects more than 10% of the enrollment;
  - A change in the special-needs status of more than 10% of the enrollment;
  - A change in program requirements (e.g., adding pre-K offerings) that affects more than 10% of the school's enrollment.
- In recalculating the SFC, the LEA or charter school operating the facility would be required to
  - Analyze the programs and activities to be delivered in the facility;
  - Document and consider
    - Projected enrollment levels by grade and student type;
    - Projected staffing (instructional, administrative, and support);
    - Design of the master schedule and bell schedule, including the lunch arrangements; and
    - Any parameters having to do with student or teacher scheduling, including
      - Caps on or standards for class sizes; and
      - Common-planning arrangements for teachers.
  - Calculate the planned utilization of the spaces in the facility;
  - Compare the planned class sizes to those used in the state's SRC calculation; and
  - Create a record of the SFC calculation that describes the programming and utilization parameters used to determine the SFC figure for the facility.
- The LEA or charter school operating the facility would submit the record to the IAC for evaluation and approval. Upon approval, the IAC would update the facility's SFC in the IAC's Facility Inventory database.

The IAC staff proposes the following process for implementing the SFC:

Outline the proposed analysis; draft the calculation and the rules that guide its use.	April 2019
Vet the proposed calculation and rules through the LEAs for input and feedback.	April 2019
Finalize the proposal and submit it to the Educational Specifications Workgroup for discussion and feedback.	May 2019
Submit the proposal to the IAC for adoption.	June 2019