

RENOVATION PROGRAMS

Renovations are aimed at ensuring that all schools provide the facilities necessary to support current educational programs regardless of the age of the buildings. Renovations are also used to restore capacity lost due to low-ratio special program instruction and other new instructional support needs (e.g., technology labs). Depending on need, a renovated school may acquire a new heating plant, air conditioning, upgraded electrical and plumbing systems, and spaces required to support the educational program. Both the usable lives of school facilities and School Board policy require renovation of buildings on 20-25 year cycles. Given the number of schools now in operation, this need implies a requirement to renovate an average of one high school, one middle school, and six elementary schools per year.

SPECIAL PROGRAM FACILITIES

The CIP includes funding to provide capacity enhancements at various schools in order to accommodate special programs such as Advanced Academic Programs and Special Education at the elementary and middle school levels. Additionally, FCPS periodically undertakes other capital projects to support its facilities. Examples include installation of safety and security systems as well as improvement of facilities for students and citizens with disabilities.

SITE ACQUISITION

The CIP proposes funding to acquire sites for future schools.

STUDENT MEMBERSHIP PROJECTIONS PROCESS

FCPS produces a projection set each school year. Once the school year begins, a five-year school-by-school projection set is produced. The last year of this set is used for the annual Capital Improvement Program.

The FCPS student membership projections process involves several steps.

STEP 1: Analysis of trends and patterns at the school system level, pyramid level, and school level.

Examples of factors that are analyzed to understand historic and current trends to prepare for enrollment projections:

- Total student membership is compared to historical patterns of membership.
- Fairfax County and the City of Fairfax births (by elementary school boundary) are compared to the kindergarten class five years later. These ratios are compared to historical patterns of birth to kindergarten ratios.
- Kindergarten class membership is compared to the previous school year's exiting 12th grade class. These numbers are compared to the past school system patterns.
- Each grade level cohort of students is compared to its previous year to understand the difference in the grade level cohort membership over time. This is referred to as "cohort progression." Ratios are developed to understand the survival rate of each cohort as it ages through the school system. This is compared to past cohort patterns.
- Fairfax County and the City of Fairfax population and housing forecasts and trends are considered to better understand local and regional economic conditions.
- Migration patterns of students entering and exiting the school system are compared to the prior year, as well as to historical patterns of migration.

STEP 2: Development of student membership projections from elementary schools to middle schools to high schools.

Factors used to produce membership projections are:

- Entering kindergarteners are projected by using actual births from prior five years by elementary school boundary and applying a birth to kindergarten ratio.

- Past cohort survival ratios are used to progress each cohort through successive grades ahead. Multi-year averages of grade level progression are considered when projecting for upcoming school years.
- Entry grades to middle school and high school are projected using historical cohort ratios of students residing in a school's boundary compared to the membership at the school. These ratios are applied to rising cohorts in the school's boundary.
- Modifications and adjustments are made, as needed, to account for other factors which may influence a particular school's membership. Examples of this include: boundary phasing decisions, housing developments, and other relevant information unique to a specific school or group of schools.

STEP 3: Special program student membership projections are factored into projections.

- Unique programs are considered as they may impact school specific membership.
- School-by-school projections from various specialists are received for: level IV advanced academic programs (AAP), special education (level 2 or self-contained), FECEP/Head Start, preschool resource, nontraditional sites, and alternative programs.

MONITORING MEMBERSHIP IMPACTS FROM NEW HOUSING

FCPS monitors residential development through development review and field verification of development status:

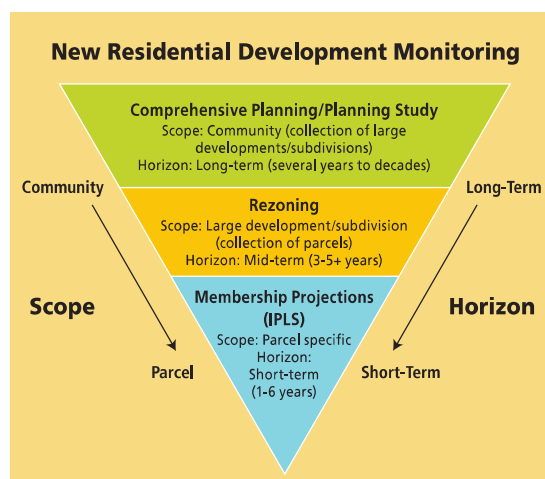
Development Review: Comprehensive Plan Studies and Rezoning Application Review

FCPS works with the Fairfax County government to determine the impact planned housing proposed from comprehensive plan studies and rezoning applications would have on school facilities. School impact analysis memos with estimated student yields from the planned and proposed development are provided to Fairfax County government and to the appropriate School Board members.

In addition to estimated student yields for comprehensive plan studies and rezoning applications, recommendations to address future school facilities needs are also provided to Fairfax County government. Fairfax County long-range planning initiatives include Tysons Urban Center, Reston, Dulles Suburban Center (Route 28 Corridor), Bailey's Crossroads Community Business Center (CBC), Seven Corners CBC, Huntington TSA, Franconia-Springfield Transit Station Area (TSA), Embark Richmond Highway (Route 1), Fairfax Center, Lincolnia CBC, Merrifield Suburban Center, McLean CBC, and West Falls Church TSA. These long-range planning initiatives and comprehensive plan studies are often the first step for planned new housing. For more information on Special Planning Areas in Fairfax County, please visit www.fairfaxcounty.gov/planning-zoning/comprehensive-plan/special-planning-areas

Development Monitoring

In conjunction with the development review process, FCPS staff conduct field verifications of previously approved applications to track the construction status of residential development. Additionally, new housing can be constructed by-right (i.e. does not require a rezoning development application to construct). This field verification process allows FCPS staff to gain insight into changes in a community and helps provide a better understanding of when and where students from new housing may have an impact on nearby schools.



ASSESSMENT OF FACILITY CAPACITY

Understanding and accurately capturing school capacity is important to ensuring the most efficient use of school facilities and capital funds. Knowing how many students a school can accommodate allows FCPS to quickly assess appropriate program placement and to develop student accommodation solutions. Accurate school capacity assessments help to ensure that classroom spaces are sized appropriately and spaces are designed with flexibility in order to meet the needs of multiple and/or changing instructional programs. Beyond current programmatic and membership challenges, accurate capacity assessments are necessary to formulate long-term facility plans.

As a follow-up to the 2007 DeJong Capacity Study and the 2008 implementation of a new methodology for school capacity calculation, FCPS provided detailed school capacity and facility information on the public website in the form of a Facility and Enrollment Dashboard, which may be found at:

<https://www.fcps.edu/enrollmentdashboard>.

School Capacity Model

It is important to note that school capacity is measured differently depending upon the school type. For instance, elementary schools are calculated based upon the number of core classrooms and self-contained special education class rooms. While some middle schools are team taught, which limits the amount of students to the quantity of rooms required to support a team, others follow the departmental teaching model and need to be assessed similarly to high schools. High school capacity is far more complex than that in elementary and middle schools. The capacity of a high school is based upon the required core programs and the various elective options available. For more information on school capacity calculation methodology please refer to the "Methodology and Calculations" link at:

<https://www.fcps.edu/enrollmentdashboard>.

School Capacity: Information and Assessment

Having determined the methodology that would be used to assess capacity for elementary, middle, and high schools, it is then necessary to evaluate how each individual school uses its spaces. The Office of Facilities Planning Services staff includes capacity architects who manage and process the annual capacity and utilization surveys for each traditional K-12 school. In this survey, school administrators are asked to indicate the use of their spaces (including modular and temporary classrooms) based on their current programs. Upon receipt of the surveys, capacity architects apply the developed methodology to recalculate the capacity of each school. The capacity is calculated considering the school building design, unique school characteristics, and program changes. Lastly, capacity architects, working closely with planning staff, use certified membership and five-year projected membership to determine the current and projected capacity utilizations. These help to identify schools with critical capacity deficits or surpluses, which inform and direct facilities planning activities such as: identifying schools that should be closed to student transfers; prioritizing potential temporary classrooms and building additions; and guide new program placement and possible boundary changes. Information on current and projected capacity utilization can be found in the Membership and Capacity Comparisons section. Modular additions continue to be counted towards capacity while temporary classrooms do not. Temporary classrooms will continue to remain on site in many schools where small capacity deficits or even capacity surplus exists. This is largely due to lack of funding to remove and store these structures elsewhere and changes in programs which require specialized spaces within school buildings. Trailer relocations take place when additional trailers are needed to accommodate an increase in membership at specific schools. The annually updated modular and temporary trailer counts for each school can be found within the Membership and Capacity Comparisons section.

Expanded facility and membership information for all schools may be viewed at the following link:

<https://www.fcps.edu/enrollmentdashboard> under the link "Facility & Enrollment Dashboard."

Temporary Classroom Needs

Fairfax County Public Schools has established a supplemental capacity method to accommodate students through the temporary provision of portable classrooms. This resource allows the School Board to maintain intended student-per-classroom and per-instructor ratios despite short-term fluctuations in school memberships.

Temporary classrooms used to address student membership and program requirements at schools and centers where the buildings themselves lack sufficient capacity. FCPS is implementing multiple strategies to reduce the use of temporary facilities. These include architectural modification of existing spaces to provide additional instructional areas, expanding capacity as part of a school renovation, relocating modular additions as permanent construction is completed, and shared use of School Aged Child Care (SACC) classrooms during the regular school day.

Membership and Capacity Comparisons

To be effective as a planning tool, comparisons between membership and capacity should be performed at different levels: countywide, by regions, by high school pyramids, and by individual schools.

Countywide Comparison

FCPS compares five-year projected capacity by level and by geographic areas. This helps inform analyses about membership trends and trends in surplus and deficit capacity throughout the entire school system. It also helps identify projected capacity needs throughout the school system.

School Level Comparisons

A better understanding of FCPS' ability to accommodate students and their instructional needs emerges by reviewing the circumstances at individual schools. Comparisons of school capacity and projected membership for individual schools at all levels are presented in the following region summaries.

Note that the impact of funded new schools, if any, is not reflected in this analysis since the effect for any one school cannot be determined until the new boundary is drawn. Although additional capacity provided by a modular building is included in the analysis, the benefits of any temporary classroom allocated to the schools is not reflected as they are not part of permanent building capacity.