

INPUTS TO CIP

Annual APS Enrollment Projection Report (every November)

Arlington Facilities and Student Accommodation Plan (AFSAP) (Alternates years with CIP)

Policy and guidelines on space allocation

School Board decisions since last CIP

ANNUAL APS ENROLLMENT PROJECTION REPORT

(EVERY NOVEMBER)

Historical enrollment;

Current enrollment;

Projected enrollment;

Standard enrollment projection methodology;

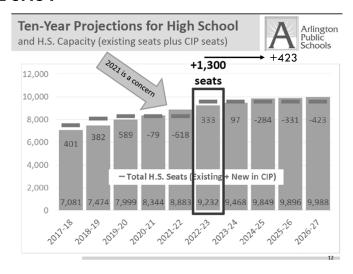
Accuracy of projections; and

Alternative projection scenarios.

ENROLLMENT FORECAST

Key indicators:

- A = Number of children born to Arlington residents (VADH)
- B = Number of students enrolled in APS in Kindergarten five years later (APS)
- Retention rate = B/A
- Retention rate for all grades, three year averages
- Very accurate in near term, less reliable in out years



ARLINGTON FACILITIES AND STUDENT ACCOMMODATION PLAN (AFSAP) (ALTERNATES YEARS WITH CIP)

Current and projected enrollment by school and grade level;

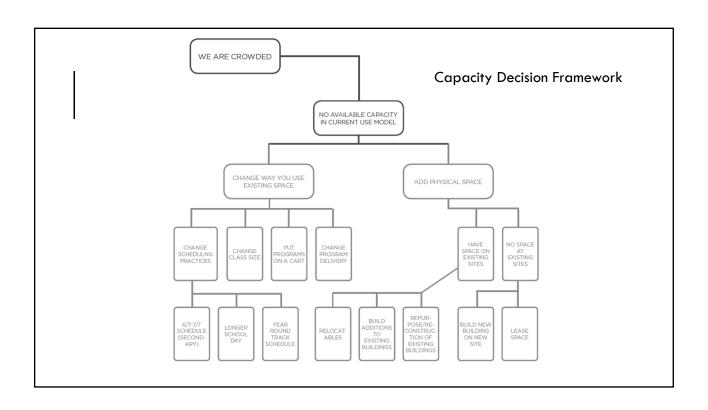
Enrollment and capacity analysis;

Description of enrollment projection methodology;

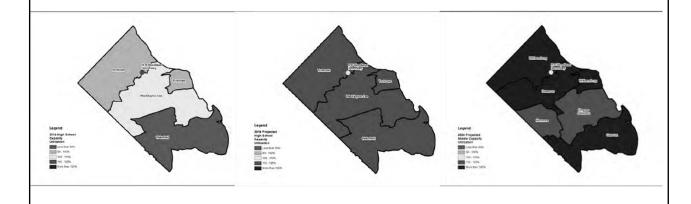
Housing trends and impact on enrollment; and

Capacity analysis maps.

CRITICAL DETAILED ANALYSIS TO INFORM DISCUSSIONS AND DECISIONS



CAPACITY UTILIZATION MAPS — HIGH SCHOOLS



POLICY 50-1 CONSTRUCTION & MAINTENANCE

Goals for each building

Provides Space Guidelines

Net square feet for rooms

Last updated 2004

"The Superintendent or designee prepares and updates guidelines, which detail the **technical**, **spatial** and **educational specifications** that implement the Arlington Public Schools capital improvement goals. These standards **consider the operating and maintenance cost impact on future budgets** and assure that each facility meets current standards for its intended purpose. The guidelines are publicly available."

2017-2026 CIP DECISIONS MAXIMIZE CURRENT SPACE

FY17-26 CIP adds Secondary Capacity Adopted June 16, 2016



- + 600 seats at Career Center site
 - + A.C.H.S. moved into Fenwick (+300) August 2016
 - + Allow for growth of Arlington Tech (+300) August 2018
- + 339 seats added to Stratford, repurposing for sixth middle school (1,000 seat total) August 2019
- + 775 seats at new school on Wilson site August 2019
- + 720 seats from internal modifications
 - + M.S. Gunston (+60), Kenmore (+60) August 2017
 - + H.S. Wakefield (+300) Aug. 2017, Yorktown (+300) August 2018
- + 1,300 new high school seats August 2022



SB DECISION RE +1300 HIGH SCHOOL SEATS

June 29, 2017 School Board Vote



Approved the superintendent's recommendation to provide 1,300 additional high school seats by 2022

The recommendation proposed the addition of

- 500-600+ seats through a renovation of the Education Center
- 700-800+ seats through an addition to the Career Center

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STRATEGIES TO ADDRESS GROWTH IN ENROLLMENT

Capital construction projects to increase seat capacity;

Non-capital strategies to increase seat capacity;

Anticipated that non-capital strategies proposed would be developed over a longer time-frame than the CIP; and

APS would develop solutions to meet short-term capacity needs prior to completion of the capital projects included in the CIP and prior to implementation of the non-capital strategies.

CAPITAL PROJECTS

Major Capital Projects

Options for renovations and additions to existing schools;

- Potential sites for new schools and other facilities; and
- Opportunities to construct schools and other facilities as part of larger developments in Arlington County.

Minor Capital/Major Maintenance

 Minor Capital/Major Maintenance (MC/MM) projects are funded with available debt capacity and other supplements to the MC/MM

Competed Projects Ongoing Projects

New Projects

HVAC Projects

Roofing Projects

Other Major Infrastructure Projects

CAPITAL PROJECTS IMPACT ON OPERATING BUDGET

Bond funded projects increased energy efficiency, lower maintenance costs, prolonged life of equipment

- □ HVAC
 - Roofing
 - Upgrades of lighting, windows and electrical systems

Facilities costs associations with new instructional programs, e.g.,

- Creative and Performing Arts performance space
- STEAM labs

Administrative and Instruction costs associated with new facilities, e.g.,

- IB training
 - STEAM lab equipment

NON-CAPITAL STRATEGIES ARE FUNDED FROM THE OPERATING BUDGET

- Increasing class size;
- Adjusting schedules and utilization factors to increase number of periods during school day;
- Expanding virtual class offerings;
- Relocating programs and changing admissions/ transfer policies to address uneven enrollment growth;
- Improving utilization of existing schools as has already been, and will continue to be, implemented;

- Expanding partnerships with higher education institutions;
- Leasing/sharing space in available facilities;
- Reprograming and intensifying the use of existing spaces, where feasible; and
- Continuing the use of relocatable classrooms, as hedge against constructing too many seats should enrollment decline in the future

COST ESTIMATES

Total Project **Cost** = construction costs, design ("soft") costs, contingencies and escalation (inflation)

- Estimated cost prepared by independent professionals in local market based on conceptual designs
- Bid cost
- Final cost, actual cost to APS after all change made during construction

"Soft costs"

- 25% of total construction cost in last CIP
- Shifted out of operating budget into capital budget in FY2016

Contingency costs generally decrease as design is increasingly well defined

Escalation 3.5% compounded annual rate in last CIP

Soft Costs

- Architecture/Engineering Fees
- Construction Management Fees
- Legal Fees Permit Fees
- Contingencies
- IT Infrastructure & Equipment
- Other Equipment
- Furniture & Furnishings
- Testing & Inspections Incidental Costs
- Real Property Acquisition

COST VARIABLES

Location: climate, site, labor market, cost index

Capacity Calculations: results vary according to methodology and policy on class size

Actual Capacity

- Neighborhood school classes are generally below maximum class size.
- Choice school classes are generally close to or at maximum class size.
- Special programs vary by school, year and need.
- Maximum number of students in a regular program may be higher than in a special program requiring same floor area.

Educational Specifications, e.g., room size, types of rooms, number of rooms

COST VARIABLES, CONT'D

Community Expectations, e.g., swimming pool, athletic facilities

Sustainable Design: LEED Gold does not add cost, Platinum does

Additions/Renovations: generally cost more than new construction

Balancing Variables:

- SF/student: gross square feet per student
- \$/student: cost per student
- \$/SF: cost per gross square foot

No. seats \neq no. students

- Seats/student
- \$/seat

CONSIDERATIONS WHEN COMPARING ARLINGTON COSTS TO OTHER SCHOOL PROJECT COSTS IN METRO AREA

Construction costs are frequently confused with total project costs when making comparisons.

Construction costs in the DC Metro region are among the highest in the nation; construction costs elsewhere in Virginia are substantially lower than in Arlington.

Educational specifications approved by the School Board may result in more square feet per student than other school divisions because of relatively low class size and the many spaces provided to support special programs. (See Space Guidelines)

APS has always renovated existing buildings when making additions to them, unlike some other school divisions that construct additions with minimal upgrades to existing buildings

COMPARING COSTS CONT'D

The number of students for which a school is designed and hence the total area of the school are often not considered when comparing the costs of different schools.

Project costs include hiring external project management and construction management services that may be provided by in-house personnel at other school districts.

Project costs include APS Design & Construction staff salaries and benefits.

Additional costs are incurred on many APS school facilities because they are also heavily used community facilities.

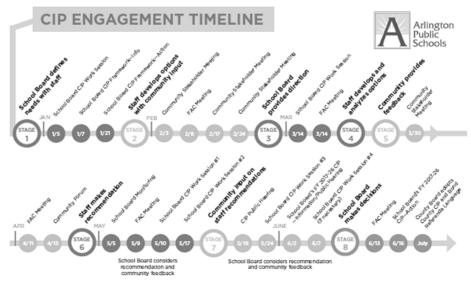
FUNDING

During development of this CIP, APS staff prepared and analyzed numerous financial scenarios in which the variables were estimated project completion, estimated project costs, timing of bond sales, and growth in County revenues (10-year historical average = 4.31%)

These scenarios provided estimates of funds available for the CIP and schedules of the bond sales needed to fund and complete the projects when needed.

The scenarios, combined with the updated three-year budget forecast, provided the guidelines and framework for building a fiscally responsible CIP for FY 2017 through FY 2026





CHALLENGES FOR CIP 2019-2028

Viability of non-capital strategies

Assessing the short and long term implications of CIP projects for operating budget

Impact of instructional focus on operating and construction costs

What are the implications of school boundary changes for the CIP?

Construction Costs

- Update space guidelines? Depends partly on seats policy
- How does a phased development timeline impact the budget?
- What are the tradeoffs between buying space and building new?
- Are the locally based Universities an option (e.g., new Marymount building)?
- What has been considered regarding dual purpose buildings?

Potential costs savings from collaboration with the County

• How does the CIP fit into the County's smart growth policy?