The School Board established the Facilities Planning Advisory Council (FPAC) in September 2010 to “advise and inform the staff and School Board in the development of comprehensive, long term plans for facilities needs in the most effective and efficient way.”

As this Annual Report was being prepared, the twenty-third school shooting of 2018 occurred. FPAC would be remiss if we did not identify safety and security as the highest priority aspect of school facilities and recommend that FCPS:

- Fund and conduct additional safety and security inspections beyond the mandated completion of the School Safety Inspection Checklist for Virginia Public Schools;
- Use the results of the School Safety Inspection Checklist for Virginia Public Schools and the results of the additional safety and security inspections to identify and prioritize improvements;
- Fully fund the highest priority safety and security items using both operating and capital funds;
- Where necessary, seek additional funding from the County and other sources to improve the safety and security of school facilities.

While FPAC’s focus is on facilities, security is a combination of people, processes and facilities, and all three aspects need to be addressed in a coordinated manner. It is also recognized that all incidents cannot be prevented, but it is incumbent upon FCPS to take action to continually improve the security of our schools.

The findings and recommendations in this Annual Report are all important, but of a greater priority are the time, attention, staffing and FUNDING necessary to improve the safety and security of the buildings in which we educate our precious students.

The FPAC charge from the School Board for school year 2017-2018 is:

"Continue to work with staff and build on work in the following areas:
- Developing the long-range vision for FCPS school facilities, to be included in the CIP;
- Developing a CIP that reflects the capacity and major maintenance requirements of FCPS and demonstrates the impact of the current bond funding limits;
- Further reviewing the effectiveness of the facilities-related energy savings and green initiatives; and,
- Analyzing the outcome of prior recommendations, re-presenting any that FPAC believes should be adopted."

The majority of this Annual Report focuses on FPAC activities related to carrying out the charge. Significant findings and recommendations in each area of the charge are provided in the body of the report. Detailed reports that explain the background and reasoning underlying the recommendations are provided as attachments.
Following our Semi-Annual Report delivered at the February 12, 2018 School Board Work Session, one of the Next Steps was to “Provide a rough outline of what an expanded CICP (Comprehensive Investment Capital Plan) would include.” This Annual Report contains our response to the Next Steps request for that information, and continues the emphasis on adequately funding the maintenance of school facilities. Due to its importance and relevance to this Annual Report, the full Semi-Annual Report is provided along with this Annual Report. Finally, the report provides information about meetings, community outreach, membership, and the year ahead.

The report contains twenty-three (23) recommendations, of which the most significant relate to identifying and funding the integrated set of requirements that address both major maintenance and the construction and renovations needed to meet enrollment requirements. In brief, FPAC recommends that staff expand the Capital Improvement Plan (CIP), which primarily focuses on new construction and renovations, to include capital requirements identified in the Comprehensive Investment Capital Plan (CICP), which focuses on major maintenance.

A prioritized grouping of recommendations, with references to the body of the report follows. Due to somewhat overlapping aspects of the annual charge, the response to the Work Session Next Steps, and the inclusion of prior recommendations, there is some duplication among the various recommendations. The recommendations are grouped below by topic, with the topics in priority sequence. The most important recommendations relate to the development of a more comprehensive CIP, followed by those related to boundary changes, 21st century teaching and learning environments, facility impact assessment of programs, follow-on to the Cenergistic contract, and working with the County.

As relates to the development of a more comprehensive CIP, FPAC recommends that:

- FCPS expand the CIP to reflect all capital requirements and funding sources, and the plan for allocating those funds to the requirements. This expanded CIP would include both renovations and new construction, along with the major maintenance requirements identified in the Asset Management Plan/Comprehensive Investment Capital Plan (CICP). (See recommendation 22, p. 9) To that end, FPAC recommends:
  - FCPS provide funding for a portfolio-wide facility condition assessment of all FCPS-owned buildings that will inform the CICP.
  - FCPS develop a proactive Asset Management Plan, to include (1) assessing the facilities, (2) identifying most critical maintenance requirements, (3) developing a facility maintenance plan, (4) identifying the timing of and funding requirements for replacing major systems at facilities not currently being renovated, (5) addressing the backlog of deferred maintenance, and (6) developing and funding resource requirements to carry out the program.
  - FCPS give more consideration to safety, security, major maintenance, and environmental needs in allocating its capital resources.
  - Beginning with the 2020-2024 CIP, staff should quantify the actual capital requirements for additional capacity and renovations to demonstrate the impact of the established bond limitations on FCPS’ ability to meet its needs.
  - Staff should continue work on the CICP and the major maintenance capital requirements should be included in the 2020-2024 CIP.

- Additional resources be provided for major maintenance and safety and security enhancements through bond funds, the operating budget, and/or additional funding from the County.
- The following be included in our 2018-2019 annual charge: FPAC work with staff to:
  - Develop the long-range vision for FCPS school facilities, to be included in the capital planning process;
  - Develop a plan to identify major maintenance and asset management requirements;
  - Assess the safety and security of FCPS facilities;
  - Develop a CIP that reflects the capacity and major maintenance requirements of FCPS and demonstrates the impact of the current funding limitations;

The recommendations above are a consolidation and summary of recommendations 9-11 and 14-22, for which more detail is provided in their respective sections of the report.
As relates to boundary changes, FPAC recommends that:

- The assessment of the impact of the new Western high school begin immediately so that the potential extent of boundary and/or pyramid changes can be identified. (See recommendation 6, p. 7)
- Boundary changes in the interim be limited to schools with severe over-crowding. (See recommendation 7, p. 7)
- The following be included in our 2018-2019 annual charge: FPAC work with staff to recommend changes to the boundary policies and processes. (See recommendation 23, p. 10)

As relates to the long range vision and 21st century teaching and learning environments, FPAC recommends that:

- FCPS implement a deliberate process to identify 21st century teaching and learning tools and techniques to determine facility design impacts, and that those changes be included in the educational specifications. (See recommendation 1, p. 5)
- 21st century teaching and learning requirements be assessed and included in facility designs as appropriate. (See recommendation 8, p. 7)

As relates to facility impact assessment of programs, FPAC recommends that:

- FCPS conduct a facility impact assessment, including transportation costs, and a cost-benefit analysis to determine how special programs, for example, foreign language immersion, advanced academic program, and music programs, should best be provided to optimize program outcomes consistent with facilities impact, transportation, and other costs. Such an assessment should consider whether a program should be undertaken, continued, discontinued, expanded or re-organized. (See recommendation 13, p. 8)

As relates to energy-savings initiatives (recommendations 2-5, p.6) most importantly, FPAC recommends that:

- Upon completion of the current Cenergistic contract, FCPS consider use of a Virginia state Energy Performance Contract (EPC) to achieve both efficient use of energy and cost savings. (See recommendation 2, p. 6)
- FCPS explore a pilot program with the National Institute of Standards and Technology (NIST) to create a demonstration project at either a new or existing school to demonstrate best practices in energy management and creation of high-performance school buildings. (See recommendation 5, p. 6)

As relates to working with the County, FPAC recommends that:

- The School Board’s liaisons to the County Planning Commission Schools Committee request that the work plan (described later in this report) be expanded to include streamlining the zoning and review approval process for FCPS facilities to, at a minimum, bring the process in line with facility and land use requirements of other County organizations (e.g., the Park Authority). (See recommendation 12, p. 8)
The Facilities Planning Advisory Council (FPAC), established in September 2010, is an advisory council to the School Board and serves to advise and inform the Fairfax County Public Schools (FCPS) staff and School Board in the development of comprehensive, long-term plans for facilities needs in the most effective and efficient way.

As this Annual Report was being prepared, the twenty-third school shooting of 2018 occurred. FPAC would be remiss if we did not identify safety and security as the highest priority aspect of school facilities and recommend that FCPS:

- Fund and conduct additional safety and security inspections beyond the mandated completion of the School Safety Inspection Checklist for Virginia Public Schools
- Use the results of the School Safety Inspection Checklist for Virginia Public Schools and the results of the additional safety and security inspections to identify and prioritize improvements
- Fully fund the highest priority safety and security items using both operating and capital funds
- Where necessary, seek additional funding from the County and other sources to improve the safety and security of school facilities.

While FPAC’s focus is on facilities, security is a combination of people, processes and facilities, and all three aspects need to be addressed in a coordinated manner. It is also recognized that all incidents cannot be prevented, but it is incumbent upon FCPS to take action to continually improve the security of our schools.

The findings and recommendations in this Annual Report are all important, but of a greater priority are the time, attention, staffing and FUNDING necessary to improve the safety and security of the buildings in which we educate our precious students.

This report provides our response to FPAC’s Annual Charge from the School Board; provides a response to the Next Steps from our Semi-Annual Report; discusses the boundary change policies and procedures; reports on our meetings, community outreach and membership; suggests areas to be included in the 2018-2019 Annual Charge; and includes twenty-three (23) recommendations.

I. RESPONSE TO FPAC’S ANNUAL CHARGE

The FPAC charge from the School Board for school year 2017-2018 is:

“Continue to work with staff and build on work in the following areas:

- Developing the long-range vision for FCPS school facilities, to be included in the CIP;
- Developing a CIP that reflects the capacity and major maintenance requirements of FCPS and demonstrates the impact of the current bond funding limits;
- Further reviewing the effectiveness of the facilities-related energy savings and green initiatives; and,
The significant findings and recommendations in each of these areas are provided below. Detailed reports that explain the background and reasoning underlying the recommendations are provided as attachments.

A. **LONG-RANGE VISION FOR FACILITIES**

**Charge:** Continue to work with staff and build on work in developing the long-range vision for FCPS school facilities, to be included in the *CIP*.

**Significant Findings:**

Beyond the two innovative examples provided by Bailey's Upper Elementary School and Thomas Jefferson High School (TJHSST), some modifications incorporated in the Langley High School renovation, and a briefing to the School Board, FPAC could not find any substantive work to implement changes in facility design or features to accommodate those that staff seems to agree will be needed in the 21st century. So far as we can determine, no such effort has been expended toward the projected new high school, or other high schools undergoing renovation, nor middle or elementary schools projected for construction or renovation.

The detailed report is provided as Attachment 1.

**Recommendation:**

1. FPAC recommends that FCPS implement a deliberate process to identify 21st century teaching and learning tools and techniques to determine facility design impacts, and that those changes be included in the educational specifications.

B. **CAPACITY AND MAINTENANCE REQUIREMENTS IN CIP**

**Charge:** Continue to work with staff and build on work in developing a *CIP* that reflects the capacity and major maintenance requirements of FCPS and demonstrates the impact of the current bond funding limits.

**Significant Findings:**

While FPAC has had continuous interactions with FCPS staff over the past several years and has provided several recommendations that, over time, have been implemented in the *CIP*, the *CIP* is actually developed as a staff action and then presented to the School Board, FPAC and the public.

FPAC is pleased that the Superintendent’s Memorandum (p. iii) makes clear that the “$155 million yearly cap on school bond sales . . . will cause delays in the schedule of many future renovation projects” given the need to prioritize “additional new schools and capacity enhancements required to accommodate membership growth.” The current level of funding is also inadequate to reduce “the hundreds of millions of dollars in the facility renovation backlogs”, as shown on page 141.

A more in-depth discussion on integration of the major maintenance requirements and the construction requirements (to include capacity requirements) is provided in Attachment 5, where the Comprehensive Capital Planning Process is explained. Using the process described in Attachment 5, the prioritization of capital expenditures will become clear, as will the impact of the limited capital funding available. Such information could help explain to the school community why promised renovations, for example, have to be delayed.

The detailed report is provided as Attachment 2.
Recommendations:

Recommendations in this area are included in section II below and detailed in Attachment 5, as part of a comprehensive capital planning process.

C. ENERGY SAVINGS AND GREEN INITIATIVES

Charge: Continue to work with staff and build on work in further reviewing the effectiveness of the facilities-related energy savings and green initiatives

Significant Findings:

As we learned in the prior school year, FCPS has many energy savings and green initiatives underway. FPAC continues to recognize the importance of energy savings and green initiatives to FCPS in both its operational budget and its capital spending plan. With as much space that FCPS maintains, the potential savings from effective initiatives is significant. This school year we received the associated metrics of the various energy savings and green initiatives that FCPS undertakes. We received an update from Cenergistic, FCPS' Energy Conservation Contractor; we sent a letter to School Board Chair Janie Straus with next step recommendations for after the current energy conservation contract expires; and we reviewed the cost effectiveness of participating in the EPA’s Energy Star program. A more in-depth report on the Energy Savings and Green Initiatives is provided as Attachment 3.

Recommendations:

FPAC recommends that:

2. Upon completion of the current Cenergistic contract, FCPS consider use of a Virginia state Energy Performance Contract (EPC) to achieve both efficient use of energy and cost savings.
3. Future participation in the Energy Star® program should be based on a cost-benefit analysis.
4. FCPS continue to fund and expand the Get2Green Program.
5. FCPS explore a pilot program with the National Institute of Standards and Technology (NIST) to create a demonstration project at either a new or existing school to demonstrate best practices in energy management and creation of high-performance school buildings.

D. PRIOR RECOMMENDATIONS

Charge: Continue to work with staff and build on work in analyzing the outcome of prior recommendations, re-presenting any that FPAC believes should be adopted

Significant Findings:

Since FPAC’s first Annual Report was delivered to the School Board in 2011, FPAC has presented a total of 69 recommendations. Thirty (30) of these have been implemented, 16 have been partially implemented, and 23 remain to be implemented.

A more in-depth analysis and a complete listing of all Prior Recommendations and the current status is provided as Attachment 4.

Below are the extracted and combined recommendations from the most significant recommendations previously provided but not fully implemented.
Recommendations:

FPAC recommends:

6. That the assessment of the impact of the new Western high school begin immediately so that the potential extent of boundary and/or pyramid changes can be identified.
7. That boundary changes in the interim be limited to schools with severe over-crowding.
8. That 21st century teaching and learning requirements be assessed and included in facility designs as appropriate.
9. That a proactive, integrated facilities maintenance program be established, to include the establishment and funding of an Asset Management Program, and the development of an integrated budget and schedule.
10. Additional funding be provided for major maintenance, through bond funds, the operating budget, and/or additional funding from the County.

In addition, FPAC repeats the following analysis and recommendations from the 2016-2017 Annual Report. These recommendations are repeated to focus attention on these important longer-term activities:

MAINTENANCE OF FCPS FACILITIES

Using the 21st Century School Fund report as a guide, FPAC encourages FCPS to develop metrics used in industry to determine the amount of financial risk associated with its facilities. Well-maintained facilities are a key factor in maximizing educational outcomes, such as increased test scores and better teacher recruitment and retention. FPAC believes that school maintenance is significantly underfunded, causing increased degradation of major building systems and higher total cost of ownership to taxpayers.

Recommendation:

11. FPAC recommends that FCPS develop a proactive facilities maintenance program, to include:
   - Providing funding for a portfolio-wide facility condition assessment of all FCPS-owned buildings that will inform the Comprehensive Investment Capital Plan (CICP).
   - Continuing with the high-level facilities inspection to establish the order in which more in-depth inspections should occur and to develop overall budgetary requirements.
   - Implementing a systematic review process to inspect all facilities over a five-year period, or 20% of facilities each year. This effort will allow FCPS to have regular assessments on its schools, identify specific projects, and allow the Board and staff to ensure most urgent requirements are being addressed in a timely manner.
   - Calculating the total facilities deferred maintenance backlog to understand the financial impact on capital projects detailed in the CIP.
   - Developing a backlog reduction spending plan equal to 1% of the current replacement value, or $62 million/year, to align with industry standards. If this is not affordable, determine the amount of funds necessary to keep the backlog from increasing year over year, and fund at least that amount.
   - Developing a resourcing plan to allow facilities maintenance program funds to grow proportional to increases in square footage, and to reflect standard inflation rates or another benchmark rate that is chosen.
   - Developing a resourcing plan, indexed to total square footage of facilities, to increase the facilities maintenance staff by at least 264 FTE (either contract or FCPS employees) over a seven-year period, or 37 FTE per year. Reassess progress each year until the ratio of preventive maintenance to reactive maintenance is roughly 6 to 1.

RELATIONSHIP WITH THE COUNTY

From insights gained over the past several years, it has become clear to FPAC that, although the relationship between the Fairfax County Department of Planning and Zoning and FCPS has
improved, there is still much that needs to be done. For example, the length of time it takes to obtain reviews and approvals severely restricts FCPS' ability to quickly respond to changing needs.

Recommendation:

12. FPAC recommends that the School Board’s liaisons to the County Planning Commission Schools Committee request that the work plan (described later in this report) be expanded to include streamlining the zoning and review approval process for FCPS facilities to, at a minimum, bring the process in line with facility and land use requirements of other County organizations (e.g., the Park Authority).

PROGRAM IMPACT AND EVALUATION

FPAC recognizes that programs and program evaluation are well beyond the scope of its charter, but programs have a huge impact on school assignments, as evidenced by the very high percentage of students who do not attend their "base" school. For example, there is one elementary school with students from 65 other “base” schools. Periodic reviews of whether the programs are producing the desired results can aid decision-making on whether to continue, expand or discontinue those programs. A cost-benefit analysis that includes facility and transportation costs can also inform decisions about whether new programs should be introduced.

Recommendation:

13. FPAC recommends that FCPS conduct a facility impact assessment, including transportation costs, and a cost-benefit analysis to determine how special programs, for example, foreign language immersion, advanced academic program, and music programs, should best be provided to optimize program outcomes consistent with facilities impact, transportation, and other costs. Such an assessment should consider whether a program should be undertaken, continued, discontinued, expanded or re-organized.

II. RESPONSE TO NEXT STEPS

Charge: Following FPAC's Semi-Annual Report delivered at the February 12, 2018 Work Session, one of the Next Steps was to “Provide a rough outline of what an expanded CICP (Comprehensive Investment Capital Plan) would include.”

Response:

Currently, the term "Comprehensive Investment Capital Plan" is used to describe the capital investment requirements for the facilities management/maintenance program. It is a separate capital investment plan from the Capital Improvement Program (CIP). Currently, the CIP only provides a plan for using funds approved via bond referenda for the following, as shown on page 22 of the FY2019-23 CIP:

- New construction
- Capacity enhancement (additions to existing schools and other modifications)
- Renovation program
- Special program facilities
- Site acquisition

A more comprehensive CIP should be developed to include all of FCPS' capital investment requirements, identification of the funding that is planned to be available, and a schedule to show how and when the funding will be allocated to the requirements. In addition, since adequate funding to meet all capital requirements is not (and is not expected to be in the future) available, trade-offs must be made and explained. Finally, the impact of the lack of funding for the remaining items should be clearly identified. The purpose is to align funding to the highest priority items and demonstrate the impact of the shortfalls.
Development of a comprehensive CIP would help ensure that every capital dollar is spent on the right long-term investment and aid the School Board in making better-informed investment decisions.

A more in-depth response and outline, along with a graphic representation, are provided as Attachment 5.

The FPAC 2018 Semi-Annual Report (separately provided with this Annual Report) was presented in February 2018, and provided several recommendations. Those recommendations are included below along with two additional recommendations.

**Recommendations:**

FPAC recommends (from the 2018 Semi-Annual Report):

14. The School Board receive the school-by-school assessments of major components, after the reports have been clarified to be more meaningful to the reader.

15. The School Board receive an update from staff on asset management, to include: the Comprehensive Investment Capital Plan, environmental factors, and the safety and security program.

16. The development of a comprehensive Asset Management Plan that:
   - Combines and integrates maintenance and renovation requirements, includes safety and security, environmental factors, the Ed Specs, and IT infrastructure along with capacity needs.
   - Assesses all aspects
   - Provides a method for prioritization
   - Requires time, funding and personnel
   - Helps ensure equity of facilities across FCPS

17. Use of the Asset Management Plan to:
   - Identify the full requirements of the CIP and CICP (to become one plan)
   - Show impact on renovation and new construction projects if the high priority facility needs are funded out of (the current level of) bond funds
   - Build the case for increased funding for both on-going maintenance/replacement and renovations

18. Use of the prioritized requirements to budget strategically for maximum effectiveness:
   - Give more consideration to safety, security, major maintenance, and environmental needs in operating budget deliberations and decisions
   - Allocate the $13.1M annual transfer from the County for major maintenance highest priority components
   - Determine whether some CIP (bond) funds should be allocated to capital components (with a 20-year expected life, such as boilers, chillers, asphalt and roofs).

19. Advocating “loud and long” with the Board of Supervisors, comparing to County buildings (not streets, sidewalks, parks).

20. Raising community awareness of need for funding increases to maintain FCPS’ reputation as a top-tier school district.

In addition, FPAC further recommends:

21. FCPS develop its major system replacement capital investment requirements by conducting a facility assessment, developing a facility maintenance plan, and identifying the timing of and funding requirements for replacing major systems at facilities not currently being renovated. A “comprehensive” CIP would integrate major system replacements and renovation timelines reflecting the life cycle of FCPS’ buildings.

22. FCPS expand the CIP to reflect all capital requirements and funding sources, and the plan for allocating those funds to the requirements. This expanded CIP would include both renovations and new construction, along with the major maintenance requirements identified in the Asset Management Plan/Comprehensive Investment Capital Plan (CICP).
III. ADDITIONAL RECOMMENDATION - BOUNDARY CHANGE POLICIES

There are several exciting and progressive events that have occurred recently that provide incentive and opportunity to improve the method(s) by which school boundaries are established for FCPS. These include:

- The School Board has requested that staff research and report on school boundary processes in use in other jurisdictions, including nearby counties and other school systems of similar size and complexity. A result of that investigation will likely lead to updating FCPS’ boundary processes.
- The geographic information system now in use provides data down to very small Student Planning Areas (SPAs) and can identify the number of students and their grade levels residing in a SPA.
- The ability to develop parameter-driven algorithms to create alternative school boundaries.
- The anticipated new high school in the northwest area of the county (late 2020s), along with several new elementary schools and planned capacity enhancements/renovations to other facilities, will require significant attendance boundary adjustments.
- The need for a dynamic, flexible, fair, and transparent policy will be critical in accommodating an ever-growing student population in the FCPS facilities available.
- The recognition that current policies and procedures have proven to be “challenging” in their ability to satisfy the numerous stakeholders involved.

Recommendation:

23. FPAC recommends that the following be included in its 2018-2019 annual charge:
- FPAC work with staff to recommend changes to the boundary policies and processes.

IV. MEETINGS

A. FPAC BUSINESS MEETINGS

FPAC business meetings were held monthly September through June, with two meetings held in May. We have been fortunate to hear from a variety of FCPS departments, several of which had not spoken with FPAC previously. Highlights of our monthly meetings are as follows:

- At our September 2017 meeting, FPAC re-elected the following slate of officers: Karen Hogan (at-large member), Chair; Daniel Aminoff (Mason District), Vice Chair; and Charles Hookey (Braddock District), Secretary.
- At our October 2017 meeting, Mike Coughlan, FCPS Director of Facilities Maintenance, discussed the efforts to identify and quantify the maintenance requirements, and the long-term impact of the severe under-funding of maintenance. He provided FPAC members with a school-by-school assessment of the asset life of several major systems. FPAC found the reports to be informative and alarming and made several suggestions for clarifying the information presented. In our mid-year report, FPAC recommended that the assessments be clarified and shared with the School Board.
- At our November 2017 meeting, Cenergistic management presented an update on the Energy Conservation Program.
- At our January 2018 meeting, Kevin Sneed and Jessica Gillis engaged with us in an in-depth discussion of the draft CIP.
- At our April 2018 meeting, we discussed with Kevin Sneed and Jessica Gillis the need for revisions to the boundary policies to improve the ability of FCPS to meet its evolving needs.
- At our May 1, 2018 meeting, Dr. Francisco Duran, FCPS Chief Academic and Equity Officer, met with us to discuss 21st century teaching and learning and their impact on facilities.
- FCPS staff and members of the community have attended and contributed to several of our meetings this year.
- We especially appreciate the regular participation and open sharing on the part of Kevin Sneed and Jessica Gillis of the Department of Facilities and Transportation Services, including their participation in our retreat.
FPAC meetings are held from 7-9 p.m. in Room 5050, as shown in the schedule on our website, https://www.fcps.edu/committee/facilities-planning-advisory-council

B. RETREAT

FPAC held an all-day retreat on February 24, 2018 at Thomas Jefferson High School for Science & Technology (TJHSST). Kevin Sneed provided a very informative tour of the recently renovated TJHSST. The keynote speakers for the retreat were Mary Filardo, founder of the 21st Century School Fund, and Jim Wilson, JFW Inc., who provides support to the Fund. The Fund’s mission is to build “the public will and capacity to modernize public school facilities so they support high quality education and community revitalization.” Highlights of their points were:

- School facilities should be supported (in part) by the federal government, as well as state and local governments. Just a ten percent contribution each by the federal and state governments would be “game-changing”.
- To address the critical and rampant underfunding of facility maintenance, broader use of school facilities by all of the taxpayers (not just the 20% with children in the schools) is necessary to bring an awareness of failing conditions. Forward-thinking facility design is necessary to accomplish this.
- The growing use of “historical” classroom space for non-core curriculum (security, music, media/computers, admin, etc.) has reduced the effective “educational” space of older school facilities.
- Use of “3P” funding (public-private partnership) should be investigated and considered.

Afterward, we divided into two groups to discuss and develop ideas on: long-range comprehensive facility planning, and the impact of wide-ranging boundary adjustments which could be triggered by the opening of a new high school on the western side of the county in the next decade.

C. MEETINGS WITH SCHOOL BOARD MEMBERS

Several individual FPAC members met with their School Board members to gain insights on various areas of interest. School Board members are encouraged to call upon their FPAC representative as needed.

D. SCHOOL BOARD WORK SESSIONS

FPAC members have attended all of the facilities-related Work Sessions held during this school year, to gain insight on Board members’ issues and concerns.

E. COMPREHENSIVE PLANNING DEVELOPMENT COMMITTEE (CPDC)

The FPAC Chair participates in the CPDC meetings, generally held once a month, to ensure coordination of efforts between the CPDC and FPAC.

F. FAIRFAX COUNTY PLANNING COMMISSION SCHOOLS COMMITTEE

Schools Committee/School Board Working Group. FPAC has participated with School Board Members and staff from FCPS Facilities and Transportation Services in the meetings of the Schools Committee of the Fairfax County Planning Commission. This year the following topics have been discussed: projection methodologies, school proffers, impact of development on schools, collocation of schools and County facilities, Comprehensive Plan support for repurposing of FCPS facilities, and a review of vacant and underutilized County property for potential FCPS use.
V. COMMUNITY OUTREACH

A. COMMUNITY TIME

FPAC allots time on its agenda for community members to provide input. This school year we have received input from several community members and observers have attended most of our meetings. FPAC encourages and receives community input via the Community Time on our agenda for business meetings, via email, from School Board members, and at a wide variety of community meetings. At both the February and March 2018 meetings, several community members spoke to FPAC about the issues with the boundaries for Rolling Valley Elementary School, Irving and Key Middle Schools, and, subsequently, West Springfield and Lee High Schools. FPAC has deferred to FCPS staff and School Board members to determine the outcome.

B. WEB PRESENCE

FPAC continues its outreach to the broader Fairfax community through our public website at: https://www.fcps.edu/committee/facilities-planning-advisory-council

The meeting schedules, agendas and minutes are located on the website along with other pertinent documents. FPAC has an FCPS email account (FPAC@fcps.edu) which is monitored by the three FPAC officers.

VI. REPORTS

In December 2017, FPAC provided a memorandum to the School Board on the Energy Conservation Contract with Cenergistic. That memorandum contained suggestions for planning future energy conservation activities following the expiration of the current contract.

In addition to this Annual Report, FPAC also delivered a Semi-Annual Report to the School Board on February 12, 2018, at a Work Session that included a discussion of major maintenance with Board members. The Next Steps item assigned to FPAC is discussed above.

Due to its importance and relevance to this report, the entire Semi-Annual Report is provided with this Annual Report.

VII. MEMBERSHIP

Four of our members have terms that expire this year. We are very pleased that two have expressed a desire to continue working with FPAC for additional 3-year terms. These members are: Kate Howarth, Providence, and Ian Kelly, Springfield. Kristen Hyatt, Sully, and Melina Dugal, At-Large, who have served for several years, have opted out of renewed appointments. Christopher Nuneviller, Lee, has resigned. We look forward to welcoming their replacements when the School Board appoints them.

In addition, our Fairfax City representative, Allen Griffith, who has been a member of FPAC since its inception in 2010, has asked the City School Board to name a replacement, which they have. We welcome Katherine (Katie) Hermann, a Certified Facility Manager with geographical information systems (GIS) expertise.

VIII. THE YEAR AHEAD AND ANNUAL CHARGE FOR 2018-19

FPAC plans to hold monthly business meetings from September 2018 through June 2019 to address the forthcoming annual charge, and

- FPAC will continue working with the staff to:
  - Expand the capital planning process to include long-range plans and develop the Facilities Comprehensive Plan (which we have been working together on for some time and which will provide a more comprehensive planning tool for FCPS);
Integrate the major maintenance, safety and security, and facility expansion and renovation needs into a comprehensive CIP; and,
Recommend changes to the boundary policies and processes.

- FPAC will seek and incorporate community input and comment, as appropriate. This is an area in which FPAC can be very effective at increasing communication and expanding options under consideration.
- FPAC will continue to address facilities-related issues and bring its recommendations to the School Board.

FPAC suggests that its 2018-2019 Annual Charge from the School Board include continuing to work with staff and build on our work to:

- Develop the long-range vision for FCPS school facilities, to be included in the capital planning process;
- Develop a plan to identify major maintenance and asset management requirements;
- Assess the safety and security of FCPS facilities;
- Develop a CIP that reflects the capacity and major maintenance requirements of FCPS and demonstrates the impact of the current funding limitations; and,
- Develop recommendations for updating the boundary policies and processes.

IN SUMMARY

FPAC has had another busy year and recognizes that there is a significant amount of information to be assimilated, that dedicated effort is required, and that there are many challenges to be met to develop recommendations on the efficient and effective long-term use of facilities resources to support the educational mission of the FCPS. We look forward to continuing our work with the School Board, the FCPS staff and the Fairfax community to address the issues with our public school facilities.
## Facilities Planning Advisory Council Members

<table>
<thead>
<tr>
<th>Member Name</th>
<th>District</th>
<th>Appointed Through</th>
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## Facilities Planning Advisory Council
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FPAC Retreat on Saturday 2-24-2018
## Facilities Planning Advisory Council
### 2017 – 2018
#### Annual Report Voting Record
##### June 2018

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* Attended fewer than 75% of meetings member was eligible to attend (SB Policy 1710.15, revised Mar 8, 2012)
ATTACHMENTS

ATTACHMENT 1: Long-Range Vision

ATTACHMENT 2: Capacity and Maintenance Requirements in CIP

ATTACHMENT 3: Energy Savings and Green Initiatives

ATTACHMENT 4: Prior FPAC Recommendations

ATTACHMENT 5: Comprehensive Capital Planning
ATTACHMENT 1

Long-Range Vision

**Charge:** Continue to work with staff and build on work in developing the long-range vision for FCPS school facilities, to be included in the CIP.

**Discussion and Findings:**

This year, FPAC was charged to review how and how well FCPS planned for and executed changes in building design and construction brought about by changes in educational methods or other external forces.

FPAC members performed a limited literature review that forecast rather fundamental changes in educational methods, environments and even locations during the 21st century.

We interviewed Facilities staff and found that they were well aware of what we found, agreed in large part with the forecasts, and had even briefed the Board on them. They identified Thomas Jefferson and Bailey’s Upper as examples of 21st century facilities in Fairfax County.

On May 1, Dr. Duran, Chief Academic and Equity Officer, attended the FPAC meeting and provided information on 21st century facilities from the Instructional Services (IS) perspective. He noted four areas in which IS feels facilities will be impacted by 21st century educational methods:

- Pre-K education, which requires a variety of indoor and outdoor play areas
- Community schools incorporating a wide range of supportive services for students and their families
- High School Pathways and expansion of Career & Technical Education (CTE) – which often use a project-based approach in non-traditional settings
- CTE exploration in middle school

Dr. Duran also noted the growing emphasis on project-based teaching (beyond CTE) at all levels and the continuing County-led SCYPT (Successful Children and Youth Policy Team) efforts.

All of the above would require significant changes to current school facility size or design.

FPAC is not convinced that FCPS is well prepared to build or renovate schools to meet the 21st century requirements that were articulated by Facilities and Instructional Services staff.

- Thomas Jefferson has, as its unique 21st century feature, 40 additional square feet per pupil. Included are a number of labs – many somewhat different than those found in traditional high schools -- which serve as project-based teaching areas. In addition, the building includes several “wired” open spaces for students to meet, eat lunch, or study. The additional space included in the building would increase construction cost for a typical high school by approximately $15,000,000.
- Bailey’s Upper Elementary School is a masterful reinvention of a commercial office building. Its imaginative use of space, color and design seems to be “one off” and may or may not form an example for the future.

Beyond these two examples and a briefing to the Board, FPAC could not find any substantive work to implement changes in facility design or features to accommodate those that staff seem to agree will be needed in the 21st century. So far as we can determine, no such effort has been expended toward the projected new high school, or high schools undergoing renovation, nor middle or elementary schools projected for construction or renovation.
Recommendation:

FPAC recommends that FCPS implement a deliberate process to identify 21st century teaching and learning tools and techniques to determine facility design impacts, and that those changes be included in the educational specifications.
ATTACHMENT 2

Capacity and Maintenance Requirements in CIP

**Charge:** Continuing to work with staff and build on work in developing a CIP that reflects the capacity and major maintenance requirements of FCPS and demonstrates the impact of the current bond funding limits.

**Discussion and Findings:**

While FPAC has had continuous interactions with FCPS staff over the past several years and has provided several recommendations that, over time, have been implemented in the CIP, the CIP is actually developed as a staff action and then presented to the School Board, FPAC and the public. FPAC reviewed and commented upon the proposed FY 2019-23 CIP that was presented to the School Board on December 14, 2017. FPAC is pleased that the Superintendent’s Memorandum (p. iii) makes clear that the “$155 million yearly cap on school bond sales . . . will cause delays in the schedule of many future renovation projects” given the need to prioritize “additional new schools and capacity enhancements required to accommodate membership growth.” Indeed, as the CIP pointedly and correctly explained, for example on page 14, the $155 million “is insufficient based on the size of the capital infrastructure to create space for increased student population and to renovate or replace buildings and equipment reaching the end of useable life cycles” or to reduce “the hundreds of millions of dollars in the facility renovation backlogs”, as shown on page 141.

The Capital Construction Cash Flow on page 44, which is premised on the $155 million cap and highlights in red all of the unfunded projects, does not include capital investments required to maintain facilities not undergoing renovation.

A more in-depth discussion on integration of the major maintenance requirements and the construction requirements (to include capacity requirements) is provided in Attachment 5, where the concept of an expanded and more comprehensive CIP is explained. Using the process described in Attachment 5, the prioritization of capital expenditures will become clear, as will the impact of the limited capital funding available. Such information could help explain to the school community why promised renovations, for example, have been delayed.

**Recommendations:**

Recommendations in this area are included on Attachment 5, as part of the comprehensive capital planning process.
ATTACHMENT 3

Energy Savings and Green Initiatives

**Charge:** Further review the effectiveness of the facilities-related energy savings and green initiatives.

**Discussion and Findings:**

As we learned in the prior school year, FCPS has many energy savings and green initiatives underway. Each is briefly discussed below.

**Cenergistic Energy Conservation Contract:** The most comprehensive and expensive of the initiatives is the contract with Cenergistic, Inc. On December 5, 2013, the School Board issued a no-bid Energy Conservation contract to Cenergistic, Inc. The contract requires FCPS to pay an annual software licensing fee and hire multiple Full Time energy specialists. Cenergistic also receives a “Performance Fee” based upon the total savings that the program achieves during the first five performance years of the contract. The performance fee is payable monthly in an amount equal to 50% multiplied by the total savings for that month, until the cumulative total gross savings reaches $20,000,000. After $20,000,000 of total gross savings, the fee is payable monthly in an amount equal to 40% multiplied by the total savings for each month.

An initial Energy Conservation Program report was delivered to the School Board on July 13, 2015, for the period of February 2014 through April 2015. This report contained performance metrics showing that there had been significant energy conservation and the associated dollar savings. The presentation also detailed some future goals of the program. No subsequent reports on the Cenergistic Energy Conservation Program have been delivered to the School Board.

At FPAC’s November 2017 meeting, Cenergistic management provided a program update. Cenergistic provided metrics on their performance to date along with detailed information on Energy Accounting, Measurement and Verification Adjustments, Energy Conservation Measures, Energy Star® Certification and next steps. FPAC was able to engage in a discussion with Cenergistic’s representatives, however, FPAC feels that many questions remained un-answered. FPAC feels that due to the limited amount of time left on the Cenergistic contract, FCPS’ focus should be on the post-Cenergistic period as opposed to merits of the current Cenergistic contract. With only 12 months remaining on the Cenergistic contract, time is of the essence in determining how FCPS intends to handle energy conservation beginning in July of 2019.

To that end, in December of 2017 FPAC forwarded a letter of concern to School Board Chair Straus indicating that the process should begin immediately to determine the future state of energy conservation and that any future contract should take into consideration the following items: Fee Structure, Contract Type, Energy Star® Certification costs, and a transition plan. As of the writing of this report, FPAC is not aware of any work done by staff on the future state of energy conservation after the expiration of the Cenergistic contract in June of 2019.

As a follow-on energy savings contract, FPAC suggests that FCPS explore options available through the Virginia state Energy Performance Contract (EPC) to potentially obtain a contractor to support and enhance the energy management program. More information on the EPC may be found at: [https://www.dmme.virginia.gov/DE/PerformanceContractingSupport.shtml](https://www.dmme.virginia.gov/DE/PerformanceContractingSupport.shtml).

**Energy Star® Program:** FCPS has also embarked on a program to have as many facilities as possible achieve the Energy Star® rating. This includes, among other things, an “Energy Star® Battle of the Buildings” contest where students and staff members become aware of saving energy, helping to save money, and lowering greenhouse gas emissions. For the second consecutive year, Fairfax County Public Schools (FCPS) has been named a 2018 Energy Star® Partner of the Year-Energy Management award winner for its efforts to improve the energy efficiency of its buildings and facilities.
FCPS first earned the EPA’s Energy Star® certification in 2015 and also has the most schools meeting Energy Star® standards of any school division in the country. FCPS has a long-standing partnership with EPA that combines principal engagement, energy-saving practices, and the use of Energy Star® certified equipment to save energy and protect the environment. This year, FCPS was recognized for finding new ways to save energy and promote its successes with the program.

Students from 47 schools participated in the 2017-18 Energy Star® Battle of the Buildings contest, designed to help students and staff members become aware of saving energy, helping to save money, and lowering greenhouse gas emissions. The program resulted in a savings of $29,000 in just three months. Students at Marshall High School took top honors in the Battle of the Buildings in the water reduction category.

FCPS continues to expand its energy conservation efforts by installing Energy Star® certified equipment during new construction and renewal projects, including LED lighting and classroom occupancy sensors, water source heat pumps, variable refrigerant flow systems, variable frequency drives, energy recovery units, and low-flow plumbing features.

However, Cenergistic’s presentation to FPAC in November of 2017 stated that over 700 hours were devoted to EPA’s Energy Star® verification, including site assessments, engineering and application review during 2015 and 2016. While Energy Star® certification is evidence of a successful energy management program and ranking against peers, it comes at a cost without an easily quantifiable financial benefit. A cost-benefit analysis of participating in the Energy Star® program once the Cenergistic contract ends could assist FCPS in determining whether continuing to invest in the designation would demonstrate a positive fiscal benefit to FCPS.

Get2Green Program: FCPS also has a robust Get2Green program that engages students in environmental action such as recycling, composting, building wildlife and native plant habitats, conserving energy, and growing food. It partners with the National Wildlife Federation’s Eco-Schools USA program, providing a framework for student involvement and action.

FCPS was recognized by the Metropolitan Washington Council of Governments with the 2016 Climate and Energy Leadership Award in the educational institution category for the Get2Green program, and by the Virginia School Boards Association as a Certified Green School Division in 2016.

FPAC encourages funding and expansion of the Get2Green program throughout the division.

High Performance Buildings. At our May 15 meeting, FPAC discussed the work done by the National Institute of Building Sciences (NIBS) and the National Institute of Standards and Technology (NIST) to develop standards for high performance buildings. "A High-performance building," as defined by the Energy Independence and Security Act of 2007 §401 (PL 110-140), is "a building that integrates and optimizes on a life-cycle basis all major high-performance attributes, including energy [and water] conservation, environment, safety, security, durability, accessibility, cost-benefit, productivity, sustainability, functionality, and operational considerations." An opportunity may exist for FCPS to work with NIST to develop a pilot, using either a new or existing school, to demonstrate a high-performance school building. Such a pilot would present FCPS as a national (and perhaps international) leader in school building design, construction and operation.

Summary. FCPS has been very successful in implementing a number of energy saving and green initiatives. While FPAC continues to have concerns about the merits of the current Cenergistic contract, FCPS should focus on the future state of energy conservation after the Cenergistic contract ends in June of 2019 and consider the use of an Energy Performance Contract. While the Energy Star® program provides visibility to the division, any future participation in the program should be based on a cost-benefit analysis. Additionally, FPAC would like to see continued funding and expansion of the Get2Green Program. And, finally, FCPS should explore options for a pilot program to develop a high-performance school building that could prove beneficial to FCPS in many ways.
Recommendations:

FPAC recommends:

1. Upon completion of the current Cenergistic contract, FCPS consider use of a Virginia state Energy Performance Contract (EPC) to achieve both efficient use of energy and cost savings.
2. That future participation in the Energy Star® program should be based on a cost-benefit analysis.
3. That FCPS continue to fund and expand the Get2Green Program.
4. That FCPS explore a pilot program with the National Institute of Standards and Technology (NIST) to create a demonstration project at either a new or existing school to demonstrate best practices in energy management and creation of high-performance school buildings.
ATTACHMENT 4

Prior FPAC Recommendations

Established in September 2010, and now completing its eighth year, the Facilities Planning Advisory Council (FPAC) continues its work as a forum and portal for citizens’ perspective regarding FCPS facility planning. The institutional knowledge acquired through cooperation with the FCPS staff and occasional guest speakers allows it to offer learned recommendations informed by the professional backgrounds of its members and input from Fairfax County residents.

From time to time it is a good idea to step back and take stock of what has been done, and more importantly, what has been left undone. From 2011 through 2017, FPAC has made a total of 69 recommendations in its annual reports. Thirty (30) of these have been implemented, 16 have been partially implemented, and 23 remain to be implemented. The file included following this attachment charts the FPAC Annual Report recommendations and the status of each.

This summary will focus primarily on the recommendations yet to be acted on (“Open” status in the file) from each Annual Report through 2016-17.

Two over-arching matters emerge from the review:
- The probable need for a county-wide boundary study and realignment (hereinafter “CBS”);
- The need to better fund major maintenance and to develop sustainable asset management procedures.

School Year 2010-11:

THEN
- In FPAC’s organizational year, the new South County MS was getting ready to open and FPAC recommended a comprehensive south (eastern portion of Region 4) and east (Region 3) -area boundary review be conducted in the 2013–2014 school year.

NOW
- Since that time, the South County MS opened. Capacity enhancements at Bucknell, Hollin Meadows, Stratford Landing, and Waynewood were completed, and a new ES was built on Ft. Belvoir. Limited-scope boundary adjustments addressed resultant capacity matters.
- The ’19-’23 CIP projects manageable capacity levels throughout the area except for West Potomac HS.
- A CBS, in association with a new Western-area HS, will be the time to revisit critical matters in the area. (Timing dictates that temporary instructional areas will need to suffice at West Potomac HS over the next few years.)
- Although not strictly a capacity matter, diversity (as “measured” by FRM percentage) continues to be an underlying challenge at the ES level, not only in this area but throughout the County, and available capacity will come into play if/when this issue is addressed, possibly in a CBS.

School Year 2011-12:

THEN
- FPAC recommended:
  - A county-wide review on location of AAP … and the location of Special Education Centers …. 
  - Review of split feeders…. 

NOW
- No two issues create more “citizen interest” in FCPS planning than AAP and split-feeders discussion. More discussion between the facilities and instructional departments on broader (pyramid-centric) AAP availability is warranted.
• Transportation savings (part of FCPS Facility department) should be considered in split-feeder studies.
• Additionally, cohort preservation (a declared FCPS goal) and pyramid/community cohesiveness can be goals of a CBS.

School Year 2012-13:

THEN
• FCPS underfunds its maintenance operations. As a result, the focus of the maintenance staff is on reactive, rather than preventive, maintenance. Moreover, instructional space is being added to the facilities inventory, with insufficient funds being included in the budget to maintain them.
• The Strategic Facilities Plan, as modified and approved, provides a set of Guidelines to be used in making facility-related decisions, but does not provide School Board endorsement of discreet criteria to make informed, prioritized resource allocation decisions.
• Proffer formula and its application needs to be examined.

NOW
• Properly funding major systems (HVAC, roof, drainage, etc.) maintenance at FCPS facilities continues to be a challenge. That FCPS facilities are maintained in reasonably good working-order is a testament to the creative fund-sourcing and efforts of the facilities department. The wholesale, every 30+ year, remodeling/reconditioning of FCPS schools is not a sustainable “maintenance” model and more professional, ongoing, routine maintenance should be funded and implemented.
• The Strategic Facilities Plan was a good beginning. The proposed Facilities Comprehensive Plan needs to become a basis for long-term decision making. Facilities staff work on revisions to the boundary alignment policies and procedures needs to be embraced.
• The continuing work on the proffers matter should be encouraged.

School Year 2013-14:

THEN
• Boundary studies …
• Implementation of 21st Century teaching and learning techniques should be considered in all construction…
• Maintenance … to ensure program-related educational specifications are delivered
• Innovative ways to use all available space must be considered …
• Minimize the use of classroom trailers…
• Reform of outdated FAR and zoning policies…

NOW
• Boundaries and maintenance continue as high-priority issues. Creative space use continues as a reasonable, if somewhat “stop-gap” solution to facility shortcomings.
• The adoption and integration of 21st Century educational techniques, including collaborative space and “distance/individual learning (on-site and off) not only addresses the need to accommodate all levels of learners with limited personnel, but also with limited facility space. The recent renovations at TJHSST and Langley should be models for all of FCPS.

School Year 2014-15:

THEN
• That facilities staff develop a campaign to encourage students to ride the bus or walk, as appropriate.
That facilities staff conduct a study of the transportation impact (pollution, ride time, costs) of maintaining attendance islands vis-a-vis an “immediate” boundary adjustment or CBS.

NOW

The “cultural” shift to more private-car delivery of students to school has been partially accommodated with enhanced “kiss-and-ride” areas, but this is unsustainable “enabling”. The use of the unrivaled FCPS bus system should be (heavily) encouraged.

The diminishment of attendance islands (and split feeders) remains a challenge.

School Year 2015-16:

THEN

That the School Board adopt a policy to require a complete review of the Education Specifications (Ed Specs) every ten years.

That any facility-related communication to the community contain the CIP-developed disclaimer regarding attendance area(s) and school-specific special program(s).

That the School Board and staff continue to actively engage with County planning efforts to ensure the Comprehensive Plan amendments … (provide) adequate school sites....

NOW

Currently, the Facilities department “keeps up” with Ed Specs on an almost “ad hoc” basis as it hears/sees/learns of current trends from both FCPS and national documentation. A more timely, deliberate, definitive, and locally determined set of Ed Specs should be incorporated into standard FCPS policies and procedures.

In anticipation of a CBS, it is critical that any and all communication with the public include (and stress) the inherent need to adjust boundaries and program offerings in order to best accommodate the largest (and smallest) needs of a diverse and growing student population within the limited facilities currently available and projected for the future.

As outlined in previous years, the need to hold/provide for school facilities by developers, through land dedication(s) and/or cash proffers must continue to be emphasized as critical to the success of not only a specific situation, but also to FCPS and Fairfax County as a whole.

School Year 2016-17:

The 2016-2017 annual report contained several long-range recommendations that have been addressed in other sections of this year’s annual report.

Conclusions

Over the years, FPAC has learned about, and striven to encourage and augment, the great effort being made by the Facilities department to provide safe, comfortable, and appropriately equipped facilities to all FCPS students, as well as personnel so that they may fulfill their assignment of educating a continually growing, diverse, and challenging student population. The long-term outlook for facility planning is encouraging. The geo-coding of every student, and more and better publically available birth and residence data, bode well for even better student population forecasting and facility planning in the future.

While capital improvements (capacity enhancements and new schools) are keeping up with needs, the underfunding of facilities maintenance remains a serious concern. By marginalizing maintenance, FCPS continues down the historical path of wholesale multi-million dollar renovations (rivalling the cost of whole new schools) which, based on the current funding model, allow facilities to get woefully out-of-date and behind educational specifications and trends.

A CBS (County-wide boundary study and realignment) taking into consideration current situations (rather than working with a 50-year old patchwork quilt of attendance areas) appears to be a more-and-more reasonable way to achieve maximum and most efficient use of ever-limited facilities, as well as implementing stated goals regarding cohort preservation and community cohesiveness (elimination of split-feeders and attendance islands).
Details and current status of all previous FPAC recommendations are provided in the file below (double click to open).

Below are the extracted and combined recommendations from the most significant recommendations previously provided but not fully implemented.

**Recommendations:**

FPAC recommends:

1. That the assessment of the impact of the new Western high school begin immediately so that the potential extent of boundary and/or pyramid changes can be identified.
2. That boundary changes in the interim be limited to schools with severe over-crowding.
3. That 21st century teaching and learning requirements be assessed and included in facility designs as appropriate.
4. That a proactive, integrated facilities maintenance program be established, to include the establishment and funding of an Asset Management Program, and the development of an integrated budget and schedule.
5. Additional funding be provided for major maintenance, though bond funds, the operating budget, and/or additional funding from the County.
## STATUS OF FPAC RECOMMENDATIONS 2010-2017

<table>
<thead>
<tr>
<th>FPAC Recommendation</th>
<th>School Board Action</th>
<th>FCPS Action</th>
<th>Status</th>
<th>2017-18 Recommended Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2011</td>
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<tr>
<td>a comprehensive South Eastern boundary review at all instructional levels be conducted in the 2013–2014 school year to address the projected overcrowding and unbalanced utilization of available capacity, and the effects of BRAC (Base Realignment and Closure).</td>
<td></td>
<td>Ft Belvoir ES opened; boundary adjustments as schools are renovated</td>
<td>Open</td>
<td>Hold until effect of New Western High School is determined</td>
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<tr>
<td>2011-2012</td>
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<tr>
<td>1. a county-wide review on location of AAP in the elementary and middle schools and the location of Special Education Centers to assess the impact on space utilization</td>
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<td></td>
<td>Open</td>
<td>consider pyramid-oriented programs (including AAP, SPED, etc) with county-wide boundary adjustment; consider transportation savings</td>
</tr>
<tr>
<td>2. a review of split feeders, including: Carson/Franklin/Stone Middle Schools, Union Mill feed to Liberty/Robinson, and various situations in the western portion of the County.</td>
<td></td>
<td></td>
<td>Open</td>
<td>Hold until effect of New Western High School is determined</td>
</tr>
<tr>
<td>3. that FCPS address capacity issues in</td>
<td></td>
<td></td>
<td>Complete</td>
<td>Richmond Hiway area solutions should be considered as a whole</td>
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<tr>
<td>a. Bailey’s/Glen Forest Elementary Schools area</td>
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<tr>
<td>b. Richmond Highway area</td>
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<tr>
<td>c. Fairfax/Oakton area</td>
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<tr>
<td>d. Western Fairfax</td>
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<tr>
<td>e. Kilmer/Jackson/Thoreau Middle Schools area</td>
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<tr>
<td>2012-2013</td>
<td>MS capacity addressed via AAP program placement</td>
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</tr>
<tr>
<td>1. approval of the Strategic Facilities Plan as presented at the September 10 Work Session.</td>
<td>Approved at at the November 19, 2012 meeting</td>
<td>Complete</td>
<td>SFP needs to be fully incorporated into Comp Facilities Plan</td>
<td></td>
</tr>
<tr>
<td>2. that the School Board increase funding for facilities operations and maintenance beginning with the 2013-2014 budget, and that funding be increased over the next several years, with the objective of increasing preventive maintenance and decreasing the need for reactive maintenance. Further, as new schools are added to the inventory, additional operations and maintenance funding should be allocated. If resources are available during the current budget year, maintenance should be considered a high priority for additional funding.</td>
<td>The FY2014 budget adopted on May 23, 2013 included an increase of $1.6 million for preventive maintenance. The School Board also requested that the Facilities staff present a plan for gradually increasing the maintenance program over time.</td>
<td>Partially complete</td>
<td>O&amp;M still extremely underfunded</td>
<td></td>
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<tr>
<td>3. that FCPS Regulation 8130.8 be amended as shown [on Attachment 2], to provide for a simplified process for boundary changes affecting between 5% and 15% of student populations at sending and receiving schools.</td>
<td>The School Board approved the suggested change, as incorporated into Policy 8130.7, to provide for a simplified process for boundary changes affecting between 5% and 15% of student populations at sending and receiving schools.</td>
<td>Complete</td>
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<tr>
<td>4. that the School Board ensure adequate coordination with Facilities Planning staff has</td>
<td>During the deliberations on AAP program changes, the School</td>
<td>Some increase in coordination at the staff level.</td>
<td>Partially complete</td>
<td>Superintendent should ensure Staff-level</td>
</tr>
</tbody>
</table>
occurred and that an analysis of the impact of changes on facilities has been thoroughly examined prior to acting on recommendations from the AAP Task Force.

| 5. | that a joint School Board/FPAC brainstorming session be held to explore concepts and opportunities. | Board included consideration of the impact on facilities. |  | coordination prior to making recommendations to the SB |
| 6. | that the School Board, FCPS staff, FPAC and the Board of Supervisors explore alternatives and solutions to address the FCPS capital funding issues. | A joint discussion of concepts, opportunities and issues was held during the April 22 Work Session | Complete | Additional funding from BOS still required for major maintenance |
| 7. | that FCPS staff work with the green and finance Work Group to review the 179D and QECP programs as potential funding sources, with a report to the School Board to be included in the FPAC Annual Report in June. | Joint Committee of BOS and School Board was formed to address capital funding issues; FPAC participated in the meetings. |  |  |
| 8. | that the FCPS staff update and revise the proffer formula to fully recover the costs associated with constructing permanent facilities, and bring it to the School Board for approval. | FCPS staff met with an expert, referred to them by FPAC, on the 179D Energy Efficient Commercial Buildings Deduction to determine its applicability to FCPS. Staff reported it was not worth the time and effort. | Partially complete | Staff continue to explore alternative funding opportunities |
| 9. | recommended that FCPS staff explore possibilities of obtaining proffer or other funds from developers of previously approved PRCs when the re-development will increase school enrollment. | FCPS staff has reviewed the proffer formula; no changes have been made. Participating in discussions with Schools Committee | Open | Continue efforts to increase proffers |

FCPS staff has reviewed the proffer formula; no changes have been made. Participating in discussions with Schools Committee | Open | Continue efforts to increase proffers |
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<tr>
<td>10.</td>
<td>that the School Board not expend any effort on amending the renovation queue criteria until the Ed Specs were updated and approved, and the timing was appropriate for the resulting new queue to impact bond [referenda] decision-making.</td>
<td>Delayed setting new priorities in renovation queue until Ed Specs are revised, and the Board of Supervisors and School Board’s Capital Facilities and Debt Management (CFDM) Working Group provides input/recommendations.</td>
<td>Complete</td>
</tr>
<tr>
<td>11.</td>
<td>that the next round of facility assessments to develop another renovation queue should be conducted close to the time when the next projects are required to be identified for a bond referendum</td>
<td>FPAC was requested to work with FCPS staff to determine the timeline by which the renovation queue criteria need to be established.</td>
<td>Complete</td>
</tr>
<tr>
<td>12.</td>
<td>that the School Board task the FCPS Facilities and Planning staff to develop a timeline to illustrate the relationship and timing of: (a.) the future bond referendum date by which a decision on funding the next projects in the queue must be made, (b.) the future bond referendum date by which a decision on funding the next projects in the queue must be made, (3.) the date by which the School Board should approve the renovation queue criteria to be used in the facility assessments, and (d) the date by which the updated Ed Specs will be presented to the School Board for approval</td>
<td>A School Board Work Session was held in November 2013 to reassess renovation queue criteria.</td>
<td>Complete</td>
</tr>
</tbody>
</table>
13. that FCPS develop and implement an Asset Management Program (AMP) leveraging the funds that would have been spent on the renovation queue facility assessment planned for this year. This AMP should provide a basis for more effective -- both in terms of qualitative results and financial costs -- management of FCPS physical assets and improve the accuracy and validity of the renovation queue when it is developed.

<table>
<thead>
<tr>
<th>2013-2014</th>
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<tbody>
<tr>
<td>1. that the FPAC charter be revised and clarified</td>
<td>The charter was revised and approved by the School Board.</td>
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<table>
<thead>
<tr>
<th>2. that staff report on the following opportunities to reduce the number of attendance area “islands”:</th>
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<tbody>
<tr>
<td>a. The Longfellow MS island should go to Cooper MS</td>
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<tr>
<td>b. The McLean HS island should go to Langley HS</td>
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<tr>
<td>c. Beech Tree islands – students should be assigned to contiguous schools</td>
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<tr>
<td>d. Navy ES island is proposed to be addressed in the CIP with a boundary study with Crossfield ES; FPAC concurs</td>
<td>Changes in enrollment figures and other influences may have altered the situations over time. Many of these attendance islands still exist, but in the 2016-2017 Annual Report FPAC recommended that such changes now be minimized due to the emergence of the need for a new high school in the northwestern part of the County, which will have a ripple effect on boundaries and pyramids.</td>
</tr>
<tr>
<td>e. Flint Hill ES island is proposed in the CIP to be linked with a boundary study with Oakton ES; FPAC concurs and recommends expanding the study to include Wolftrap ES.</td>
<td></td>
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|  |
|---|---|
| Partially complete. Asset Management Program still needs to be funded and established |
| Complete |
| Open |

Hold until effect of New Western High School is determined
1. Ravensworth, Keene Mill, and Halley Elementary Schools require a major study due to the complexity of the boundaries and populations.
2. Fort Hunt ES and Groveton ES should be included in the Richmond Highway Study.
3. a number of areas where boundary studies should be considered.
4. that FCPS consider alternatives to alleviate overcrowding caused by AAP Centers.
5. that FCPS investigate leasing a current structure in lieu of building a new school, and/or constructing an urban school rather than a traditional elementary school facility where a need had been identified in the northwest area of the County.
6. that the existing “renovation queue” should be maintained until the School Board determines how the next queue is to be developed and the scope of schools to be included, and the ranking of schools listed for renovation in the CIP should be maintained.
7. that capacity enhancements should have priority over renovations.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Status</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ravensworth, Keene Mill, and Halley Elementary Schools require a major study due to the complexity of the boundaries and populations.</td>
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<tr>
<td>Fort Hunt ES and Groveton ES should be included in the Richmond Highway Study.</td>
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<tr>
<td>a number of areas where boundary studies should be considered.</td>
<td>Open</td>
<td>Hold until effect of New Western High School is determined</td>
</tr>
<tr>
<td>that FCPS consider alternatives to alleviate overcrowding caused by AAP Centers.</td>
<td>Some of these, such as the Jackson Middle School changes have been undertaken. Other options have been included in the CIP.</td>
<td>Partially complete</td>
</tr>
<tr>
<td>that FCPS investigate leasing a current structure in lieu of building a new school, and/or constructing an urban school rather than a traditional elementary school facility where a need had been identified in the northwest area of the County.</td>
<td>The CIP plans for an “urban design” upper elementary school on the McNair Elementary School site.</td>
<td>Complete</td>
</tr>
<tr>
<td>that the existing “renovation queue” should be maintained until the School Board determines how the next queue is to be developed and the scope of schools to be included, and the ranking of schools listed for renovation in the CIP should be maintained.</td>
<td>The renovation queue has remained as developed.</td>
<td>Complete</td>
</tr>
<tr>
<td>that capacity enhancements should have priority over renovations.</td>
<td>Capacity enhancements are now included in the CIP and are prioritized over renovations.</td>
<td>Complete</td>
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<td>8.</td>
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<td></td>
<td>that maintenance and/or construction to ensure program-related educational specifications are met at all FCPS high schools should be a priority.</td>
<td>Where program-related upgrades are required, they are planned for and included in the CIP.</td>
</tr>
<tr>
<td>9.</td>
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<td></td>
<td>implementation of 21st century teaching and learning techniques (technology) should be encouraged prior to adding more space to existing schools or constructing new schools.</td>
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<td>10.</td>
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<td></td>
<td>that innovative ways to use existing space including SACC classrooms, auditoriums, cafeterias and media centers should be encouraged to maximize use of FCPS facilities.</td>
<td>Classrooms allocated to SACC are identified in the Dashboard</td>
</tr>
<tr>
<td>11.</td>
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<td></td>
<td>that the use of trailers as temporary space requires continuous review and a program should be established to manage that use so trailers are placed where they are most needed and removed once the need passes.</td>
<td>The CIP contains a section on how and where trailers are used and estimates have been provided on the cost or removing and replacing them throughout the system.</td>
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<tr>
<td>12.</td>
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<td>that, from a facility perspective, modular units that become part of the building are preferable to trailers.</td>
<td>Modular units are installed where needed and feasible.</td>
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<tr>
<td>13.</td>
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<td></td>
<td>that FCPS should adopt a goal of having no trailers at elementary schools; at least, no core elementary instruction should be conducted in trailers.</td>
<td>The CIP contains a section on how and where trailers are used and estimates have been provided on the cost or removing and replacing them throughout the system.</td>
</tr>
<tr>
<td>14.</td>
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<td>that all temporary facilities should be “connected” to the school with a covered walkway.</td>
<td>There is an effort to reduce the number of temporary facilities in use. Most are not connected to the school</td>
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<td>15. that FCPS work with the County to reform the FAR and zoning regulations to recognize the current transformation of Fairfax into an urban county.</td>
<td>School Board addressing this with the Schools Committee of the county Planning Commission</td>
<td>Discussions are held at the staff level. There has been little progress.</td>
</tr>
<tr>
<td>16. that procedures be developed for privately funded solar system installations at schools.</td>
<td>Procedures were developed. Interested parties use the DC407 Facility Modification procedure.</td>
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<tr>
<td>17. that the Superintendent provide the School Board with a report by 15 November 2013 on the status of work to date • To explore the viability of FCPS use of the 179(D) program, and • To secure additional resources for FCPS via the 179(D) program.</td>
<td>Although some research was done on the 179(D) program, FCPS missed the opportunity to benefit financially from the program.</td>
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</tr>
<tr>
<td>18. that: • Capacity should take priority over renovations. • Overcrowded schools should be specifically addressed in the CIP.</td>
<td>Both of these recommendations have been implemented in the CIP.</td>
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<tr>
<td>19. that the School Board establish facility requirements for educational programs (e.g. science and technology laboratory requirements), and direct that all schools with such programs, countywide, receive an upgrade via the CIP where needed to support the educational program.</td>
<td>Where program-related upgrades are required, they are planned for and included in the CIP.</td>
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<tr>
<td>20. that where extensive modifications are required at overcrowded schools, classroom capacity will be added</td>
<td>This is included in the planning for school modifications/enhancements.</td>
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simultaneously by reclaiming the space formerly used by the existing laboratories.

| 21. that health and safety enhancements (e.g. lavatories, lighting and HVAC) for all schools in need of these enhancements should be prioritized over more extensive "full scale" renovations. | FCPS is "ahead of code" re ADA compliance, which requires modification within 10 years (or during major reno) of any new ruling. Transition plan in place to address these issues (sometimes forced by use of school as State/Federal polling place). Several sites had restroom facility upgrades ahead of planned renovation. | Partially complete | If maintenance were fully funded, capital funds would not need to be prioritized and used for safety enhancements |

| 22. that where trailers are in use and projected to be needed for the long-term, the CIP should provide a capacity enhancement solution and the funding to support it. | Trailers are listed in the CIP along with their uses. Capacity enhancement funding requirements are included in the plan to reduce/eliminate trailers. | Partially complete |

| 23. that the CIP include all FCPS facilities (e.g., FCPS facilities that were once schools and are now used for other purposes) in order to maintain visibility of all FCPS assets. | The CIP now includes all FCPS facilities and properties. | Complete |

| **2014-2015** | | |

| 1. that over-enrollment at McNair Elementary School needs an immediate solution, ideally effective as soon as SY 2015-2016. | An Upper Elementary School is planned for the McNair site to relieve overcrowding. | Complete |

<p>| 2. that facilities staff should develop a campaign to encourage students to ride the bus or walk to school, as appropriate. | | Open | Campaign should be established. |</p>
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<tr>
<td>3.</td>
<td>that facilities staff (in consultation with FPAC) should identify the capacity thresholds and other school circumstances that trigger the consideration of a boundary adjustment.</td>
<td>Survey of boundary adjustment best practices is underway; to be followed by recommendations on revised boundary adjustment policies and procedures</td>
<td>Partially Complete</td>
<td>Should be part of the revisions to boundary policies</td>
</tr>
<tr>
<td>4.</td>
<td>that if enrollment projections are realized and capacity thresholds are triggered, boundary adjustments appear to be reasonable options.</td>
<td>The CIP now indicates where boundary adjustments are an option.</td>
<td>Complete</td>
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<tr>
<td>5.</td>
<td>that facilities staff should conduct a study of the transportation impacts (pollution, ride time, costs) of school islands to determine if and where boundary adjustments would be beneficial.</td>
<td></td>
<td>Complete</td>
<td>Hold until effect of New Western High School is determined</td>
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**2015-2016**

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<tbody>
<tr>
<td>1.</td>
<td>that the proposed Educational Specifications (Ed Specs) be acted upon by the end of the 2015-16 school year in order that they may be incorporated into Facilities and Transportation Service’s planning for future new schools, renovations and capacity enhancements.</td>
<td>Revised Ed Specs are used for planning purposes.</td>
<td>Complete</td>
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<tr>
<td>2.</td>
<td>that the design and program capacity indicated for each school be separately reported by the actual brick-and-mortar building and by any modular units, in order to provide a clearer representation of the school’s overall capacity.</td>
<td>Now included in the CIP/Dashboard</td>
<td>Complete</td>
<td>Ed Specs for 21st c schools should be a dynamic part of</td>
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<tr>
<td>3.</td>
<td>that the School Board adopt a policy to require a complete</td>
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<td>Open</td>
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<tr>
<td>Review of the Educational Specifications (Ed Specs) every 10 years.</td>
<td>CIP identifies need for new schools where boundary changes will not suffice</td>
<td>Complete</td>
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<tr>
<td>4. that the School Board place a moratorium on constructing any new schools until all boundary options in the affected attendance areas have been fully explored and vetted.</td>
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<tr>
<td>5. that the FCPS Boundary locator web page verbiage be modified to: FCPS provides no guarantee that any residential address will continually be served by the same elementary, middle and/or high school(s) or Advanced Academic Centers. Further, FCPS provides no guarantee that any school will continue to offer the programs currently offered.</td>
<td>Complete</td>
<td></td>
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</tr>
<tr>
<td>6. that any facility-related communication to the community contain the following disclaimer: FCPS provides no guarantee that any residential address will continually be served by the same elementary, middle and/or high school(s) or Advanced Academic Centers. Further, FCPS provides no guarantee that any school will continue to offer the programs currently offered.</td>
<td>CIP and most staff work includes this &quot;advisory&quot;.</td>
<td>Partially Complete</td>
<td></td>
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<tr>
<td>7. that, with respect to re-use of former schools and use of FCPS-owned land sites, the continued use and further</td>
<td>Needs to be added to Boundary Locator and Transfer Policy &quot;websites&quot; and communications. Office of Communication and Community Relations (OCCR) should also include this advisory in its communications.</td>
<td>Complete</td>
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development of analytical tools that would allow FCPS planners to make assumptions about initial costs, recurring costs (utilities, maintenance, leases, etc.), salvage/demolition costs, and return on investment is warranted.

8. that the School Board and staff continue to actively engage with County planning efforts to ensure the Comprehensive Plan amendments ultimately adopted are consistent with FCPS policy and direction and that adequate school sites are provided for the projected students.

Comp Plan Amendments are complete. Need to address Development Review, Impact on Schools and Proffers. Staff "being heard" on the impact of new development(s) and what cost such incurs. Proffer formula "under discussion" by BOS member(s).

Development Review Process and Proffers still need to be addressed with the County

9. that the School Board work with the Board of Supervisors to discuss increasing the $155 million annual bond cap and that the School Board support and actively encourage the County Executive's proposed review and consideration of raising the $275 million bond sales limit.

2018-2023 CIP sent to County with request for additional bond funding; County provided additional $25M/year starting FY2020

Complete

2016-2017

1. that the School Board:
   • Declare that a new high school is required in the western part of the County
   • Designate the FCPS-owned 38-acre site where Hutchison Elementary School is located as the site for the new high school
   • Recognize that opening a new high school will require significant

Actively move ahead with planning for the New Western High School; include planning funds in 2019 bond; begin related boundary adjustment scope and work.
boundary changes and potential pyramid re-alignments
- Include funding for the new high school in the 2019 school bond referendum.

2. that FCPS provide for the new western high school in the next CIP, and:
   - Project the necessary funding stream, to begin immediately following the 2019 bond referendum
   - Minimize boundary adjustments in the areas likely to be impacted by the opening of the new high school to those required in the short term to accommodate student enrollment
   - Delay actions to achieve pyramid alignment
   - Develop a plan to accommodate Hutchison attendance area elementary students

3. that, beginning with the 2019-2023 CIP, the actual capital requirements for additional capacity and renovations be quantified to demonstrate that the annual bond debt limit of $155 million/year imposed by the Board of Supervisors is inadequate, and to illustrate the need to increase that current limitation on capital spending

4. that FCPS develop a proactive facilities maintenance program, to include:
   - Continuing with the high-level facilities

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<th>2.</th>
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Open | Actively move ahead with planning for the New Western High School; include planning funds in 2019 bond; begin related boundary adjustment scope and work. |

Open | Included in response to 2017-2018 Charge |

Open | Included in response to 2017-2018 Charge |
inspection to establish the order in which more in-depth inspections should occur and to develop overall budgetary requirements.  

- Implementing a systematic review process to inspect all facilities over a five-year period, or 20% of facilities each year. This effort will allow FCPS to have regular assessments on their schools, identify specific projects, and allow the Board and staff to ensure most urgent requirements are being addressed in a timely manner.  
- Calculating the total facilities deferred maintenance backlog to understand the financial impact on capital projects detailed in the CIP.  
- Developing a backlog reduction spending plan equal to 1% of the current replacement value, or $62 million/year, to align with industry standards. If this is not affordable, determine the amount of funds necessary to keep the backlog from increasing year over year, and fund at least that amount.  
- Developing a resourcing plan to allow facilities maintenance program funds to grow proportional to increases in square footage, and to reflect standard inflation rates or another benchmark rate that is chosen.  
- Developing a resourcing plan, indexed to total square footage of facilities, to increase the facilities
maintenance staff by at least 264 FTE (either contract or FCPS employees) over a seven-year period, or 37 FTE per year. Reassess progress each year until the ratio of preventive maintenance to reactive maintenance is roughly 6 to 1.

5. That FCPS conduct a facility impact assessment, including transportation costs, and a cost-benefit analysis to determine how special programs, for example, foreign language immersion, advanced academic program, and music programs, should best be provided to optimize program outcomes consistent with facilities impact, transportation, and other costs. Such an assessment should consider whether a program should be undertaken, continued, discontinued, expanded or re-organized.

6. That the 2012 Strategic Facilities Plan (SFP) stand as a document of record without modification, and that the Guidelines in the SFP be incorporated, as approved by the School Board, into the CIP, with the Facilities Comprehensive Plan eventually taking the place of both documents.

7. That its annual charge for the School Year 2017-2018 include continuing to work with staff on the Facilities

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<th>Open</th>
<th>repeat recommendation</th>
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<td></td>
<td></td>
<td>Open</td>
<td>include in Comprehensive Facilities Plan</td>
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<td>Complete</td>
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<tr>
<td>Comprehensive Plan, particularly in identifying long-term solutions and incorporating them into the CIP</td>
<td>Done. However, by rule, some totals from DIT and to/from State are different due to categorization.</td>
<td>Complete</td>
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<td>8. that, since the CIP and the budget are sent to the County at approximately the same time, FCPS should either ensure the enrollment projections are the same or clearly explain why they differ</td>
<td>Data being collected in GIS/Student Information System</td>
<td>Partially complete</td>
<td></td>
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<td>9. that FCPS continue to closely monitor both in-migration of students from outside the County and movement of current students within the County as residential areas (e.g., Silver Line corridor, Tysons area, Embark/Richmond Highway corridor) are developed and populated to gain insight on the number of additional students entering the system</td>
<td>FPAC and the Superintendent received Cenergistic update briefings</td>
<td>Complete</td>
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<tr>
<td>10. that Facilities Management staff update the School Board with the latest performance metrics of the Cenergistic energy conservation contract at the earliest possible time</td>
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<tr>
<td>11. that Facilities Management staff provide a total cost analysis of the Energy Star programs to determine the actual savings that result from them and to advise as to whether any of these organic savings programs are compensable to Cenergistic</td>
<td>Partially complete</td>
<td>Evaluate cost/benefit of participating in Energy Star program</td>
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<td>as part of their energy conservation contract</td>
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<td>12. that FCPS do more to get the word out about the Get2Green program and be sure it is available to as many students who wish to participate in the program as possible</td>
<td></td>
<td></td>
<td>FCPS needs to continue its outreach, so that additional schools can take part in the program.</td>
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<td>13. that the School Board’s liaisons to the County Planning Commission Schools Committee request that the work plan be expanded to include streamlining the zoning and review approval process for FCPS facilities to, at a minimum, bring it in line with facility and land use requirements of other County organizations</td>
<td>Staff reports some progress if/when BOS intervenes (e.g. Bailey's Upper and McNair plans). Schools Committee trying to improve zoning process for FCPS; FAR flexibility is needed.</td>
<td>Open</td>
<td>FCPS needs to enjoy &quot;preferential” treatment at County zoning and permitting (as other agencies receive). Education is Constitutionally mandated, but not given priority in County administration. Design Review and Permitting, including FAR, need flexibility.</td>
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<tr>
<td>14. that the School Board request that the Board of Supervisors provide the bond premiums obtained from the sale of school bonds to FCPS to address capital requirements</td>
<td></td>
<td>Open</td>
<td>FPAC should reinforce this request.</td>
</tr>
<tr>
<td>15. that analysis of prior recommendations be included in our annual charge for the School Year 2017-2018</td>
<td></td>
<td>Complete</td>
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ATTACHMENT 5

Comprehensive Capital Planning

Following FPAC's Semi-Annual Report delivered at the February 12, 2018 Work Session, one of the Next Steps was to "Provide a rough outline of what an expanded CICP (Comprehensive Investment Capital Plan) would include."

Currently, the term "Comprehensive Investment Capital Plan" is used by FCPS Facilities Management to describe the capital investment requirements for the facilities maintenance program. It is a separate capital investment plan from the Capital Improvement Program (CIP), and in spite of it being referred to as a "comprehensive" capital plan, it is not currently envisioned to include construction and renovation. Due to the confusion caused by referring to the facilities management capital requirements as the "Comprehensive Investment Capital Plan (CICP)," it is suggested that the Asset Management Plan be used to determine and quantify the capital requirements for maintaining all facilities over time and that the term CICP be abandoned.

Currently, the CIP only provides a plan for using funds approved via bond referenda for the following as shown on page 22 of the FY2019-23 CIP:

- New construction
- Capacity enhancement (additions to existing schools and other modifications)
- Renovation program
- Special program facilities
- Site acquisition

A more comprehensive CIP should be developed to include all of FCPS' capital investment requirements, identification of the funding that is planned to be available, and a schedule to show how and when the funding will be allocated to the requirements. In addition, since adequate funding to meet all capital requirements is not (and is not expected to be in the future) available, trade-offs must be made and explained. Finally, the impact of the lack of funding for the remaining items should be clearly identified. The purpose is to align funding to the highest priority items and demonstrate the impact of the shortfalls.

Missing from the CIP is any plan or funding, for schools not currently being renovated, to address replacement of major capital systems or to bring them up to current facility standards. This results in increased maintenance costs, increased risk of major system failure, and increased risk to students and teachers in the facilities. It also results in inequitable educational opportunities, safety and security, and overall facility condition among the schools in the district.

FCPS currently has identified a major system replacement backlog of $128 million, a figure that increases significantly each year. The facilities management staff is creating a ten-year "Comprehensive Investment Capital Plan" focused on maintenance requirements. The County Board of Supervisors has provided an annual allocation of $13 million for major maintenance items. This amount needs to be significantly increased, and the plan for using such funds needs to be reflected in the Comprehensive Investment Capital Plan and integrated into a comprehensive CIP that would include all capital requirements, all capital funding, and an integrated schedule of investments.

Development of a comprehensive CIP would help ensure that every capital dollar is spent on the right long-term investment and aid the School Board in making better informed investment decisions.

The capital investment plan does not stand alone, however. It is supplemented with the annual operations and maintenance (O&M) funding that addresses ongoing operations. Inadequate funding of the annual O&M requirements leads to earlier replacement of major systems that are not properly maintained.

In the FPAC Semi-Annual Report (separately provided), several recommendations (included in the Recommendations below) were provided to support the proposed way ahead outlined as:
• Understand the current state (conduct assessments)
• Develop a comprehensive asset management plan (that integrates, assesses and prioritizes asset requirements)
• Budget strategically
• Advocate for additional funding

Below is a rough outline of the three major plans that provide input for the expanded and more comprehensive capital investment/improvement plan, and the major content of resulting plan:

1. FCPS Strategic Plan
2. CIP
   • Enrollment and Capacity
     o Determines capacity and location requirements
   • New Construction Requirements
     o Funding Requirements for Land/Building Acquisition, Planning, Construction
     o Timing/Schedule Requirements
3. Asset Management Plan – integrating the renovation program with facility maintenance
   • Assessment of Facilities
     o Condition
     o Ed Specs (Educational Specifications)
     o Safety & Security
     o Capacity
     o Requirements to bring up to standard
     o Funding Requirements to meet needs
   • Maintenance Plan
     o Major Systems
     o Maintenance Requirements
     o Maintenance Funding Requirements
       ▪ Major Maintenance – capital budget ("Comprehensive Investment Capital Plan")
       ▪ Operations & Maintenance – operating budget
   • Renovation Plan
     o Timing and Sequence of Renovations ("the Queue")
     o Based on Facility Assessment, Capacity Requirements
     o Schedule with Funding Requirements
4. Expanded and More Comprehensive Capital Improvement Program – an expansion of the current CIP to include capital requirements from the Asset Management Plan.
   • Total Capital Requirements
     o Needed to meet capacity requirements (new construction, additions)
     o Needed to address facility assessment (Ed Specs, safety and security, upgrades to meet standards, etc.)
     o Needed for major maintenance (capital items)
     o Needed for renovations
   • Spend Plan
     o Available Funding Allocated to Requirements on Timeline
     o Explanation of Trade-offs
     o Unmet Requirements and Impact

A diagram of the relationships among these various plans is provided at the end of this Attachment.

As FPAC has recommended the development of an Asset Management Plan, we have included some thoughts about why such a plan is important and what it should contain. The file follows the diagram described above and provides an explanation and some examples of what might be included. The
framework presented is for the strategy and planning aspects and shows how the FCPS strategic outcomes are addressed through asset management. Once the strategy, guiding principles, objectives, and initiatives have been determined, they will drive the requirements, timing and funding needs that become incorporated into the more comprehensive CIP.

Recommendations:

FPAC recommends (from the Semi-Annual Report):

1. The School Board receive the school-by-school assessments of major components, after the reports have been clarified to be more meaningful to the reader.
2. The School Board receive an update from staff on asset management, to include: the Comprehensive Investment Capital Plan and the related asset management plan, environmental factors, and the safety and security program.
3. The development of a comprehensive Asset Management Plan that:
   - Combines and integrates maintenance and renovation requirements, includes safety and security, environmental factors, the Ed Specs, and IT infrastructure along with capacity needs.
   - Assesses all aspects
   - Provides a method for prioritization
   - Requires time, funding and personnel
   - Helps ensure equity of facilities across FCPS
4. Use of the Asset Management Plan to:
   - Identify the full requirements of the CIP and CICP (to become one plan)
   - Show impact on renovation and new construction projects if the high priority facility needs are funded out of (the current level of) bond funds
   - Build the case for increased funding for both on-going maintenance/replacement and renovations
5. Use of the prioritized requirements to budget strategically for maximum effectiveness:
   - Give more consideration to safety, security, major maintenance, and environmental needs in operating budget deliberations and decisions
   - Allocate the $13.1M annual transfer from the County for major maintenance highest priority components
   - Determine whether some CIP (bond) funds should be allocated to capital components (with a 20-year expected life, such as boilers, chillers, asphalt and roofs).
6. Advocating "loud and long" with the Board of Supervisors, comparing to County buildings (not streets, sidewalks, parks).
7. Raising community awareness of need for funding increases to maintain FCPS' reputation as a top-tier school district.

In addition, FPAC further recommends:

8. FCPS provide funding for a portfolio-wide facility condition assessment of all FCPS-owned buildings that will inform the comprehensive capital planning process.
9. FCPS develop its major system replacement capital investment requirements by conducting a facility assessment, developing a facility maintenance plan, and identifying the timing of and funding requirements for replacing major systems at facilities not currently being renovated. A "comprehensive" CIP would integrate major system replacements and renovation timelines reflecting the life cycle of FCPS' buildings.
10. FCPS expand the CIP to reflect all capital requirements and funding sources, and the plan for allocating those funds to the requirements. This expanded CIP would include both renovations and new construction, along with the major maintenance requirements identified in the Asset Management Plan/Comprehensive Investment Capital Plan (CICP).
Relationships among Plans

FTS Planning, Design and Construction

FTS Facilities Management

FTS Safety and Security

Capital Improvement Program (CIP)

Asset Management Plan

Safety and Security Assessment

Legend: Green – Exists
        Yellow – In Progress
Asset Management Plan: Strategy and Planning Highlights

Asset Management is a staff responsibility, as is the development of appropriate planning documents. FPAC can play a role in advising on the need for an Asset Management Plan and its content, as well as assisting staff in validating program outcomes (or objectives) and assessing resourcing levels and progress.

The purpose of this document is to show what the beginnings of an asset management plan might look like. Using the asset management methodology chart shown on the next page, some of the main points under Strategy and Planning are suggested, along with example program outcomes. Once the strategy, guiding principles, objectives, and initiatives have been determined, they will drive the requirements, timing and funding needs to enable the management of FCPS’ assets.

Why Asset Management?

In sum, asset management supports the realization of value while balancing financial, environmental and social costs, risk, quality of service and performance related to assets.

The benefits of asset management can include:
- Improved financial performance: improving the return on investments and reducing costs can be achieved while preserving asset value and without sacrificing the short or long-term realization of organizational objectives.
- Informed asset investment decisions: enabling the organization to improve its decision making and effectively balance costs, risks, opportunities and performance.
- Managed risk: improving health and safety, good will and reputation, minimizing environmental and social impact, can result in reduced liabilities.
- Improved services and outputs: assuring the performance of assets can lead to improved services or products that consistently meet or exceed the expectations of customers and stakeholders.
- Demonstrated social responsibility: improving the organization’s ability to, for example, reduce emissions, conserve resources and adapt to climate change, enables it to demonstrate socially responsible and ethical business practices and stewardship.
- Demonstrated compliance: transparently conforming with legal, statutory and regulatory requirements, as well as adhering to asset management standards, policies and processes, can enable demonstration of compliance.
- Enhanced reputation: through improved customer satisfaction, stakeholder awareness and confidence.
- Improved organizational sustainability: effectively managing short and long-term effects, expenditures and performance, can improve the sustainability of operations and the organization.
- Improved efficiency and effectiveness: reviewing and improving processes, procedures and asset performance can improve efficiency and effectiveness and the achievement of organizational objectives.
Step 1 - Develop Asset Management Strategy

**Mission:** Manage assets in a safe, secure, cost-effective, and sustainable manner to support current and future FCPS requirements.

**Vision:** A portfolio of real and personal property assets that is appropriately sized and aligned to support learning outcomes for our students.

**Asset management plan alignment with FCPS strategic plan**

FCPS Ignite strategic goals are:
- Student Success
- Caring Culture
- Premier Workforce
- Resource Stewardship

Studies show that facilities matter to educational outcomes of our children. The three main facilities performance indicators of overall facilities quality are:
- condition
- capacity
- configuration

Step 2 - Determine asset management plan guiding principles

The following are example of guiding principles for safe, secure and healthy schools that might be adopted:
1. Use Educational Industry Benchmarks and Best Practices to assess FCPS asset management performance.

2. Employ Life-Cycle Cost-Benefit Analyses to justify asset management and acquisition decisions.

3. Promote Full and Appropriate Utilization by operating the property asset to its maximum capacity during its useful economic life (determined by using FCPS benchmarks) while satisfying the educational and administration requirements of FCPS. This includes boundary changes approved by the board.

4. Provide Appropriate Levels of Investment by making and prioritizing capital investment decisions, such as whether to construct, alter, repair, and/or acquire space to meet changing needs using 21st century schools as a guide.

5. Accurately Inventory and Describe All Assets by maintaining real property data at the constructed asset level.

6. Employ Balanced Performance Measures to track progress toward achieving real property program objectives and enable benchmarking against other public school organizations to include the 21st century schools report.

7. Maximize student learning outcomes by promoting efficient and effective classroom spaces, productive work spaces and focusing on the schools unique needs, such as changing space requirements, special needs students, etc.

8. Provide for Safe, Secure, and Healthy Workplaces by implementing standard policies and procedures, documenting asset conditions, and developing action plans and strategies to support a productive workforce.

Step 3 - Determine asset management objectives (program outcomes)

Program outcomes should reflect the method that asset health is measured. An algorithm or formula can be used to calculate which buildings have the highest needs, based on severity and criticality of the asset deficiency. Some example objectives are:

- **Condition**
  - 75% of major building systems (electrical, mechanical, etc) are rated as fair or higher.
  - Reduce the average recapitalization rate for FCPS school facilities from 37 years to 25 years by 2040.

- **Capacity**
  - Eliminate 90% of all classroom trailers and replace with bricks & mortar buildings by 2030.
  - Ensure that FCPS has all land property necessary to support FCPS future requirements by 2030.

- **Configuration**
  - Each school is configured to the latest state school security standards by 2023.
  - Each school meets indoor air quality standards appropriate to school environments.

Additional program initiatives can be considered to help improve educational delivery, improve environmental stewardship, or reduce total costs of ownership. Examples include:

- Reduce the number of split feeder schools by 50% by 2025.
- Build all new schools to meet net zero energy standards starting construction in 2027
- Using 2017 as the baseline, reduce each building’s energy use intensity by 15% by 2023.
- To ensure equity and level risk across the portfolio, Implement APPA level 3 for maintenance, custodial, grounds.
Elementary school children shall not travel on the bus more than 30 minutes from the time of the first bus stop to the first school bell. School board and superintendent shall initiate formal and administrative boundary changes to allow FTS to stay within program objectives.

FCPS and the school board can determine the right mix of capital and operating expenses that will achieve the desired program outcomes by the dates required.

Program outcomes can be used to inform minimum acceptable levels of funding across the portfolio. The following issues could be addressed asset management (AM) objectives such as the examples shown:

**Issue 1** – distance travelled by elementary school students on school bus.

**AM objective 1** – Optimize the bus route so that amount of time that an elementary school student spends on the bus from the first bus stop to the first school bell shall be no more than 30 minutes.

**Issue 2** – split feeders are highly disruptive on student cohorts, splitting up peer groups and impacting student’s emotional support networks.

**AM Objective 2** – Reduce the number of students that are negatively impacted by split feeders schools by 50% by 2025.