

Appendix G – Project Descriptions and Justifications

	PROJECT	DESCRIPTION & JUSTIFICATION	FY 19 COUNTY FUNDING REQUEST
County and State Funded			
1	Tulip Grove ES Major Renovation and Addition	Tulip Grove Elementary is a one-story, 42,275 sq. ft. facility located on a 10 acre site, in Bowie MD. Built in 1964 with a small addition in 1971, the school had a State Rated Capacity of 388 students in 2014 before closing for a major renovation and addition project. This is one of the nine schools recommended for replacement in the May 8, 2008, updated Facility Assessment Study. The 2012 Updated Facility Assessment confirmed that this school had an FCI of 76.28% which indicates poor condition. This school is currently undergoing major renovations of existing 23,350 SF and an addition of 41,480 SF to meet the educational requirements. The State approved \$4,885,000 in the FY 18 CIP. The current funding request is for the remaining State's share. The facility will be designed with new state-of-the-art "GREEN" school features and a 3,594 SF gymnasium addition for a larger State Rated Capacity of 411 students. Prior State Capital Improvements include: 2002 \$54,596 TIMS; 2001 \$83,418 Entire Roof Replacement; 2009 \$487,000 HVAC Renovation.	\$12,011,332
2	Stephen Decatur Middle Renovation/Addition Special Education Inclusion (SEI)	Stephen Decatur Middle School is a one-story, 120,070 sq. ft. facility located on a 16.4 acre site, in Clinton, MD. The original building was constructed in 1971 as an open space school with a small addition in 1994. Stephen Decatur Middle School currently has a State Rated Capacity of 901 with a projected enrollment of 746 in 2023. Even with the reorganization to K-5/6-8, the projected enrollment is anticipated to remain below the PGCPS 800 student MS prototype capacity over the next seven years. In addition to the comprehensive program, there is a CRI (Community Reference Instruction) program at the school. PGCPS is proposing a Special Education Inclusion (SEI) renovation project to serve the up to 38 special education Regional Program students currently located at the Tanglewood Regional stand-alone facility. This is part of a District initiative to close three of the four stand-alone Regional Schools. In FY16 the State approved planning for a renovation for the CRI/Regional Program and an addition for a therapy pool with lockers. The therapy pool addition will serve all K-12 Regional students in the area. The current concept plan shows the previously identified FACS lab replaced with a more educationally relevant STEAM Lab. Lacking an adequate number of science labs for the projected 800 student enrollment, the concept plan also includes renovation of the existing classrooms to create two new science labs. (See proposed sketch plan.) The educational specification for the special education Regional Program requires large classrooms (1,000+ SF) to accommodate equipment and therapy needs. The design includes five self-contained classrooms with adjacent toilet/changing spaces, storage for orthopedic equipment and support programs as well as related services including Speech and Language, OT, PT, offices, a conference room, an expanded health suite, and records storage. The total renovation proposed is 37,838 GSF and the total addition is 9,396 GSF for a combined total of 47,234 GSF. This request is for the total \$21,792,960 estimated construction cost for the renovation plus addition to accommodate the SEI program. Prior State Capital Improvements at Stephen Decatur include: 1994 Addition (\$254,755); 1998 TIMS Project (\$59,903); 2012 POD Conversion into (8) classrooms (\$592,501) and QZAB Network Infrastructure (\$138,761)	\$11,492,000
3	Bowie Belair HS Annex Limited Renovation	Bowie-Belair HS Annex is a split level building with a ground and first floor of 102,351 sq. ft. located on a 16.06 acre site, in Bowie, MD. The original building was constructed in 1963. Only 1st year 9th graders attend the Bowie Annex. This request is for funding approval for a limited renovation and improvements to the existing instructional spaces to include selected educational program enhancements and a minimum of five systemic improvements, as required. Systemic Improvements will include the following throughout the entire building: (1) The removal and replacement of the suspended ceiling system, (2) The replacement of all Univent and related piping and plumbing accessories, (3) The replacement of the old piping with new Hot and Cold Piping System, (4) Central Air Conditioning, (5) Replacement of the 1989 re-roofing of the original building including canopies for a total square footage of 78,604 sq. ft. (See the attached preliminary drawing indicating roof areas.)The existing roof slope will be improved where possible with tapered insulation and crickets will be installed between drains to improve drainage. All of the original 1963 perimeter metal and drains and expansion joints will be replaced, (6) Replacement of the fire sprinkler system. The existing water service will not be suitable to supply the entire building structure; it may require a fire system pump to assist with associated accessories to indicate piping, valves etc. Fire code may require a stand pipe system if structure exceeds building height and area limits. Add pipe hangers to support piping. Supply sprinkler head in area to meet fire code specifications. The sprinkler system will be installed according to 2012 NFPA 13 and 2012 IBC code as appropriate. The existing fire alarm system and electrical system is under capacity and able to support this project. Educational enhancements include the following renovations to meet Board adopted educational specifications: (A) One Integrated Science Classroom (123), (B) Two Science Labs and a Prep Room (120,121), (C) Computer Lab (116), (D) Family and Consumer Lab (114), (E) Standard Classrooms, Corridor areas and support Bathroom and Storage spaces. (F) Foundation of Technology Classroom (119). This is a request for the balance of construction funding. State planning and \$5.501M in construction funding was approved in FY17.	\$14,556,000

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4	William Wirt MS - Replacement	<p>Based on a feasibility study completed in December 2014, William Wirt Middle School is recommended for replacement. William Wirt MS was identified as having critical issues related to indoor air quality, a failing building envelope, and severe overutilization. It has therefore been prioritized to be among the first schools to be addressed in the PGCPS modernization program. The current State Rated Capacity (SRC) is 850 with a projected 2023 enrollment 1629 after 6th grade realignment to provide enrollment relief for the elementary school feeders. Using the educational specifications developed for the FY2015 William Wirt Feasibility Study, the Educational Facility Master Plan (EFMP) recommends 64,000 additional SF for a maximum capacity of 1200. Cooperative use space is requested to support existing community partners to include meeting/classroom space, a family center, pantry, storage, and partnership office space. A letter of support will be submitted. Additional enrollment relief will be provided by building a new middle school scheduled to open in school year 2021-22 in this planning area. Local funds were approved in FY2016 and FY 2017 to contract for environmental studies, finalize design capacity, and begin the design process. State planning approval and additional local funds of \$4.344 million were approved in FY18 to complete the design. The total FY19 request of \$9.0 million (\$4.5 million State, \$4.5 million County) is for construction funds to begin the project in the spring 2019.</p>	\$4,500,000
5	William Schmidt Center Major Renovation and Addition (Funding)	<p>Phase 1 (New Construction): Construction of new residential building(s), Villages II for sleeping capacity of 220 students and 24 adults in 16 cabins and replacement of Villages I for a capacity of 120 students and 24 adults in 12 cabins. The square footage recommendation for the Villages II buildings is approximately 18,000 sq. ft. and for Villages I buildings is approximately 11,000 sq. ft. The existing Villages I building will be demolished (12,445 sq. ft. of demolition). This will allow for the Orme School building to be used for first grade trips and expand capacity to house more students for overnight visits. Currently the Orme School building has sleeping capacity of 120. With the new residential building(s) and an additional 30 beds, the Schmidt Center will be available for more students, teachers, and parents. A new dining hall nearby by the new residential building(s) will support meals for the students and chaperones. Suggested square footage is now 6,500 for the dining hall—it was 3,000 to 5,770 sq. ft. in the FY 2017-22 CIP and Ed Specs. It will have a seating capacity of up to 300 students and 50 adults. A raised platform/stage will be provided at one end of the dining hall for performances. Construction of a new 6,500 sq. ft. Environmental Research Center (ERC) will serve as an educational and community resource lab to reinforce the understanding of sustainability and to provide hands-on instructional space for students of all ages, including the middle and high school students. Construction of two new pavilions for outdoor seating—Pavilion 1 by Villages I would be approximately 3,000 Sq. Ft. and Pavilion 2 near Villages II would be approximately 1,800 Sq. Ft.</p> <p>Exterior site and roadway improvements are also required as the current conditions are deteriorating. Improved road access to the western side of the William Schmidt Center campus near existing Horsehead Road may be needed to connect the campus. Phase II (Renovations): The Orme school building was constructed in 1956. The renovations will include HVAC and other safety system upgrades as well as significant programmatic improvements and changes. The purpose of this building will change from a residential facility for fifth grade students as currently used to a site to host first grade field studies (day programs only), a training center for professional staff development for teachers, and classroom space. The existing cafeteria will be reimagined as a large multipurpose room with a stage for various large group activities. Approximately 17,383 sq.ft. of the Orme building is recommended for renovation. Approximately 5,050 sq.ft. of the Neville Administrative Building built in 1982 will be renovated. The property also has two standing tobacco barns, which will be restored, if feasible. One will be used as a teaching space to examine the agriculture and history of the area in Prince George's County.</p> <p>Local funds of \$1.52 million were approved in FY 18 to contract for environmental studies and complete design. The FY19 request is for construction funds.</p>	\$5,000,000
6	New Adelphi Area Middle School No. 1 (Planning)	<p>Since the PGCPS Board adopted an educational initiative to transition 6th grade students to middle school, the system has been gradually changing to a Grades K-5/6-8 configuration on a 'space available basis.' However, a complete reorganization will not be able to occur in the northern part of the county unless the District adds new middle school capacity. The estimated budget is based on a 1,200 student SRC and approximately 174,000 SF building. The new school will include a three room cluster for students with severe and profound disabilities (Special Education Regional Program) currently located at James Duckworth Regional. This is part of a district initiative to close 3 of the 4 stand-alone facilities.</p> <p>PGCPS conducted a Site Feasibility Test Fit study along with a public survey for five possible sites. Of the five sites, the Adelphi Road Park site was ranked as the highest quality and most suitable site for this new middle school. This site was approved by the School Board on May 12, 2016 and will support the educational program defined by the educational specifications, taking into account program delivery, cost and existing conditions. In accordance with the Interagency Committee (IAC) Administrative procedures, the State Clearinghouse on September 2, 2016 approved the designated use of this site.</p> <p>The FY19 request is for State planning approval and local funds to complete the design process and if feasible, to begin site work in the spring 2019. Construction funds will be requested in FY2020.</p>	\$5,000,000

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7	New Glenridge Area Middle School No. 2 (Planning)	<p>Since the PGCPS Board adopted an educational initiative to transition 6th grade students to middle school; the system has been gradually changing to a Grades K-5/6-8 configuration on a 'space available basis.' However, a complete reorganization will not be able to occur in the northern part of the county unless the District adds new middle school capacity. The estimated budget is based on a 1,200 students SRC and approximately 174,000 SF building. The new school will include a three room cluster for students with severe and profound disabilities (Special Education Regional Program) currently located at Margaret Brent Regional stand-alone facility. This is part of a district initiative to close 3 of the 4 stand-alone facilities.</p> <p>PGCPS conducted a Site Feasibility Test Fit study along with a public survey for three possible sites. Of the three sites, the Glenridge Park site was ranked as the highest quality and most suitable site for this new middle school. This site was approved by the School Board on May 12, 2016, and will support the educational program defined by the educational specifications, taking into account program delivery, cost and existing conditions. In accordance with the Interagency Committee (IAC) Administrative procedures, the State Clearinghouse on September 2, 2016 approved the designated use of this site.</p> <p>The FY19 request is for State planning approval and local funds to complete the design process and if feasible, to begin site work in the spring 2019. Construction funds will be requested in FY2020.</p>	\$5,000,000
8	Suitland HS Complex Renovation/ Replacement (Planning)	<p>Suitland High School is scheduled to receive a full modernization/replacement with the planning to begin in FY2018 with a feasibility study. The study will encompass the entire Suitland campus comprised of the main comprehensive school building, the annex (Center for the Visual and Performing Arts), the Career and Technology wing (Technical Academy) and the adjacent middle school, Drew Freeman, also scheduled for a full renovation with planning to begin in FY2021. Suitland HS was identified as having critical systems deterioration and therefore prioritized to be among the first schools to be addressed in the PGCPS modernization program. The current SRC for the Suitland Campus is 2506 with a projected 2023 enrollment of 2292. In the winter 2017, PGCPS and the Prince Georges County government contracted for a study to consider location and program delivery options for the CVPA. The intergovernmental steering committee chose a 'stand-alone' school option but did not finalize the location. Pending a final decision, the 'new' Suitland HS will be for 1500 students in the comprehensive program, 500 students in the Center for the Visual and Performing Arts, and 500 students in the Technical Academy.</p> <p>Local funds of \$6 million were approved in FY18 to develop a school specific educational specification, conduct a feasibility study, contract for environmental studies and complete design of the campus buildings.</p> <p>Two Project Planning Committees (PPC), one for CVPA and one for high School & technical academy, were established in June 2017 to begin the feasibility study. An Architecture/Engineering consulting team has been selected to pursue the design process.</p> <p>The FY19 request is for State planning approval and local funds to complete the design process and if feasible, to begin construction in the spring 2019. The remaining construction funds will be requested in FY2020.</p>	\$12,000,000
9	New International HS at Langley Park (Planning)	<p>PGCPS opened two new International High Schools in 2015 to offer traditionally underserved students (i.e. high percentage of at risk, economically disadvantaged English language learners and first generation college goers) and newcomer immigrant students an innovative opportunity to complete a high school diploma in a learning environment customized to their specific learning needs. One school will be located in the northern part of the County where the largest number of newly arrived immigrant students requiring English as a Second Language (ESL) services live. Currently the 'northern school' is housed in relocatable classrooms on the Annapolis Road Academy Campus. The proposed SRC for the International High School is 400 with a projected future enrollment of 400. The draft educational specification for this school recommends a 56,822 SF building. The final scope will be determined during design.</p> <p>Local funds of \$1 million were approved in FY 18 to develop a school specific educational specification, contract for environmental studies, design of the campus buildings and, to the extent possible, begin the construction process.</p> <p>A Project Planning Committee (PPC) was established in June 2017 to review the Educational Specifications and the architectural design. An Architecture/Engineering consulting team has been selected to pursue the design process.</p> <p>The FY2019 request is for State Planning approval and local planning funds to complete the design process, and, if feasible, start construction in the spring 2019. State construction funding will be requested in the FY20 CIP.</p>	\$2,500,000

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10	Woodbridge ES Limited HVAC Upgrade	<p>The original school building was built in 1954 with additions in 1963, 1979 and 1994. Mechanical systems serving the building include two steam boilers feeding a 2-pipe system. Downstream equipment includes Steam Heating Coils, Air Handling Units (AHUs), Electric and Steam Cabinet Unit Heaters (steam in kitchen), Convectors and Classroom Unit Ventilators. Additional equipment in the school includes packaged Roof Top Units (RTUs) in the entire building.</p> <p>The scope of this project includes abandoning the existing steam system in place (including all piping and unit ventilators). The outside air openings in the back of unit ventilators shall be sealed off, demolishing duct mounted steam heating coils, convectors, kitchen cabinet unit heater and multi-purpose room air handlers. Abatement will be done for piping insulation. The scope of the project also includes replacing all Convectors with electric type thru-wall Convectors throughout the school. The kitchen cabinet unit heater will be replaced with an electric ceiling mounted type unit heater. The AHUs in the multi-purpose room will be replaced with ceiling mounted AHUs with a direct expansion cooling coil (connect to existing condensers on roof) and electric heat. RTU-6 and RTU-7 currently are not equipped for fresh air input. These units will be modified to add an economizer. RTU-2, 3 and 4 are multi-zone units. These units will be replaced with new VAV type RTUs and variable air volume boxes will be installed downstream as required to maintain current zoning. Additionally, the existing pneumatic control system will be replaced with Fully Open Tridium/Niagara AX System. All new equipment will have a rib relay with Hand Off Auto (HOA) and placed on our existing Energy Management System that is a Tridium Server, version 4.0. Replacing the steam system will alleviate loss of energy due to steam leaks. A new 4-pipe system would allow for heating and cooling year round. Controls upgrade will allow for more efficient monitoring and management of HVAC systems.</p>	\$826,000
11	Andrew Jackson MS Exterior Windows Replacement	<p>The 151,163 sq. ft. school building was built in 1971. The existing exterior single hung steel windows installed in 1971 are 45 years old. These windows have exceeded their service life causing repeated work orders and safety concerns. The windows are leaking, have severe deterioration and rust around the frames resulting in energy inefficiencies.</p> <p>The scope of this project includes removal and replacement of all exterior windows throughout the building. The work consists of demolishing existing window system, removal of all related debris, and installation of 92 commercial grade aluminum single hung insulated window units including new flashing and metal cladding of exposed surfaces. The scope of this project also includes repairing disturbed openings including; interior spackling, painting, acoustical ceiling, exterior tuck-point and brick replacement affected by new construction.</p>	\$125,000
12	Phyllis E. Williams ES Piping and VAV Box Replacement	<p>The existing building was constructed in 1976 with an addition in 1994. The existing mechanical system core consists of an air cooled chiller and two gas-fired hot water boilers feeding a four-pipe system. Downstream equipment includes eight (8) air handling units (AHUs) located in the penthouses and one air handling unit located in the boiler room. Each individual classroom/zone is locally served by a bypass type variable air volume (VAV) terminal box. Exterior zones in classrooms are served by air handling units and ceiling mounted hydronic cabinet unit heaters. The addition is served by four gas-fired packaged roof top units (RTUs). Controls system is pneumatic and is not centrally controlled.</p> <p>The scope for the new work is to replace the sixteen (16) existing hydronic cabinet unit heaters, forty-eight (48) VAV terminal boxes and the hydronic piping system. The unit heaters, VAV boxes and piping systems are at the end of their usable life and require replacement. The existing VAV boxes are bypass type terminal boxes not capable of having the existing controls retrofitted to DDC controls. The new terminal boxes shall be units that can be used as a bypass type terminal box but has the ability to be easily reprogrammed to operate as a conventional VAV terminal unit. These boxes shall also be compatible with a future DDC controls system upon replacement of the air handling units (county project). Piping replacement shall also include replacement of all four (4) distribution pumps. Destructive replacement of the existing four-pipe hydronic system will require replacement of the suspended ceiling and lighting. New lighting fixtures shall be LED type fixtures.</p>	\$1,193,000

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13	Dwight D. Eisenhower MS HVAC & Building Envelope Modernization	<p><u>HVAC System</u> The existing HVAC system was installed when the original building was built in 1969 with additions built in 1974. The system consists of three dual fuel (oil/gas) steam boilers with three heat exchangers and two (2) water cooled chiller/cooling towers connected to a 2-pipe system in each building. The downstream unitary equipment includes unit ventilators, air handling units, finned tube radiators and fan coil units. The controls are pneumatic and not centrally controlled by an energy management system.</p> <p>The scope of work includes replacing the central controls system, HVAC piping, all ten (10) air handling units (with exception of units installed in the penthouse in 2008), forty-five (45) finned tube radiators, four (4) self-contained unit ventilators, seventeen (17) floor mounted fan coil units, two (2) ceiling mounted air handling units for science classrooms, one (1) 140 ton water cooled chiller and cooling tower, all three (3) steam to hot water heat exchangers and all six (6) floor mounted pumps. The back building currently has three cooling only or heating only air handlers with finned tube radiators in classrooms. Additionally, this include the furnishing and installation of new variable units with thirty-five (35) variable air volume terminal boxes for zone control. This project will include a ceiling system with new grid, tile and LED light fixtures.</p> <p><u>Building Envelope Component System (Doors, Windows, and Window Walls)</u> The exterior wall enclosure will be replaced to provide upgraded insulation to maintain indoor air quality, temperature, humidity and minimize moisture. This will provide energy efficiency and enhanced sustainability. The replacement of the existing window wall system, windows and doors are necessary as this original building system has exceeded its service life causing repeated work orders and safety concerns. The scope includes the following items:</p> <ol style="list-style-type: none"> 1. The removal of thirty one (31) existing window wall systems and replace it with a commercial grade aluminum window wall and paneling systems. The glazing will consist of LOW-E Glass with replaceable extruded rubber. The storefront doors will receive new hardware including; panic devices, lock hardware, closers, pulls, door sweeps, thresholds etc. This will include new flashing and metal cladding of exposed surfaces. 2. The removal of two hundred and thirty four (234) existing window units and will replaced with commercial grade single hung aluminum windows with double insulated units including, which will receive new flashing and metal cladding of exposed surfaces. 3. The removal of forty-five (45) existing exterior doors, door- frames to be replaced with commercial grade hollow metal doors and frames. This will include new hardware panic devices, lock hardware, closers, pulls, door sweeps, thresholds etc. The replacement is necessary as the exterior doors have exceeded its service life causing repeated work orders and safety concerns. 	\$4,992,000

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14	Walker Mill MS HVAC & Building Envelope Modernization	<p><u>HVAC System</u> The existing HVAC system was installed when the original building was built in 1970. The existing HVAC system consists of two dual fuel (oil/gas) hot water boilers and a water cooled chiller/cooling tower connected to a 4-pipe system. The existing chiller and cooling tower are oversized for the building causing overcooling, which allows the building to retain excessive condensation with mold forming on building surfaces. The exterior of the building is stained from condensation weeping out of the bricks. The downstream unitary equipment includes three large air handling units, mixing boxes, a 5 ton split system for the admin offices, finned tube radiators, and convectors. This is a double duct air distribution system requiring air handlers that must be custom built to replace, which is very costly to operate because of the number of fans that are required to operate non-stop for on demand heating and cooling. The existing domestic water system is original to the facility inception containing lead in soldered joints. The controls are pneumatic and not centrally controlled by an energy management system. The windows, doors and storefronts are single pane uninsulated units original to the building's inception. The new scope of work includes replacing the HVAC piping system, chiller, cooling tower, four (4) air handling units, (96) mixing boxes, thirty-five (35) finned tube radiators, fifteen (15) convectors, and controls. The new variable air volume terminal boxes with hot water reheat shall replace the obsolete mixing boxes. The two (2) new variable type air handlers shall replace the double duct type custom air handling units. A new constant volume air handling unit shall replace the original gym air handling unit. The existing split system in the admin area shall be replaced in kind. The domestic water piping will be replaced above ceiling, replacing all lavatories, sinks, bubblers and water coolers.</p> <p>The existing pneumatic controls system shall be replaced with Fully Open Tridium/Niagara AX System. All new equipment will have a rib relay with HOA and placed on our existing Energy Management System that is a Tridium Server, version 4.0. The remaining HVAC equipment shall be retrofitted with the new controls system. The new system would provide the ability to heat and cool simultaneously year round. The controls upgrade will allow for better monitoring and management of HVAC systems.</p> <p><u>Building Envelope Component System (Doors, Windows, Storefront, Window Wall)</u></p> <ol style="list-style-type: none"> 1. The removal of seven (7) existing window wall system and replace it with a commercial grade aluminum windows and paneling systems. The glazing will consist of LOW-E Glass with replaceable extruded rubber. 2. The removal of seven (7) existing store front system and replace it with a commercial grade aluminum window wall and paneling systems. The glazing will consist of LOW-E Glass with replaceable extruded rubber. The storefront doors will receive entrance doors including; aluminum vertical and horizontal fabrication including new hardware such as new panic devices, lock hardware, closers, pulls, door sweeps, thresholds etc. This will include new flashing and metal cladding of exposed surfaces. 3. The removal of one hundred and thirty eight (138) existing window units and will replaced with commercial grade single hung aluminum windows with double insulated units including, which will receive new flashing and metal cladding of exposed surfaces. 4. The removal of twenty four (24) existing exterior doors, door- frames to be replaced with commercial grade hollow metal doors and frames. This will include new hardware panic devices, lock hardware, closers, pulls, door sweeps, thresholds etc. The replacement is necessary as the exterior doors have exceeded its service life causing repeated work orders and safety concerns. 	<p>\$5,286,000</p>

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15	Glenridge ES HVAC & Building Envelope	<p><u>HVAC System</u> The existing HVAC system was installed when the original building was built in 1954 with additions built in 1955, 1963, and 1965. The system consists of two dual fuel (oil/gas) steam boilers connected to a 2-pipe system. The downstream unitary equipment includes unit ventilators, air handling units, finned tube and radiators. The steam boilers were recently replaced with new units under a previous contract due to age related internal rust from steam leaks and could not be repaired. The existing domestic water piping system is also original with lead solder in the joints and wrapped with asbestos insulation running through crawl spaces and block walls. There are five (5) newly installed split systems currently serve the daycare and head start classrooms. The central controls are pneumatic and not centrally controlled by an energy management system. The existing domestic water system is original to the facility inception containing lead in soldered joints. The existing windows and exterior doors are also original and do not help to contain energy through the building envelope.</p> <p>The new scope of work includes removing the existing steam piping and all associated downstream units and controls with exception of the five (5) split systems recently replaced on the first floor. Install five (5) rooftop units, one (1) air handling units, twenty (20) variable air volume terminal units, twenty (20) power roof ventilators, eighty (80) finned tube radiators, forty-five (45) hydronic floor mounted unit ventilators, twenty (20) recessed convectors, five (5) floor mounted fan coil units, five (5) hydronic heating coils for newly installed first floor units, heat exchanger, and an air cooled chiller with all required pumps and accessories. The existing electrical service will require an upgrade to accommodate this new HVAC equipment due to additional electrical loads. The domestic water piping will be replaced in its current location, replacing all lavatories, sinks, bubblers and water coolers. This project will include a ceiling system with new grid, tile and LED light fixtures.</p> <p>The existing pneumatic controls system shall be replaced with Fully Open Tridium/Niagara AX System. All new equipment will have a rib relay with HOA and placed on our existing Energy Management System that is a Tridium Server, version 4.0. Any remaining HVAC equipment shall be retrofitted to new controls system. The new system would provide ability heat and cool simultaneously year round. The controls upgrade will allow for better monitoring and management of HVAC systems.</p> <p><u>Building Envelope Component System (Doors, & Windows)</u> The exterior wall enclosure will be replaced to provide upgraded insulation to maintain indoor air quality, temperature, humidity and minimize moisture. This will provide energy efficiency and enhanced sustainability. The replacement of the existing windows and doors are necessary as this original building system has exceeded its service life causing repeated work orders and safety concerns. The scope includes the following items:</p> <ol style="list-style-type: none"> 1. The removal of two hundred and twenty one (221) existing window units and will be replaced with commercial grade single hung aluminum windows with double insulated units including, which will receive new flashing and metal cladding of exposed surfaces. 2. The removal of nineteen (19) existing exterior doors, door- frames to be replaced with commercial grade hollow metal doors and frames. This will include new hardware panic devices, lock hardware, closers, pulls, door sweeps, thresholds etc. The replacement is necessary as the exterior doors have exceeded its service life causing repeated work orders and safety concerns. 	<p>\$4,717,000</p>

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16	Lamont ES HVAC & Building Envelope	<p><u>HVAC System</u> The existing HVAC system was installed when the original building was built in 1964 with a 15,000 square foot addition in 1966. The existing HVAC system consists of two dual fuel (oil/gas) steam boilers connected to a 2-pipe system. The downstream unitary equipment includes unit ventilators and air handling units. This system has multiple leaks due to rust and has exceeded its useful life. The existing domestic water system is original to the facility inception containing lead in soldered joints. The controls are pneumatic and not centrally controlled by an energy management system. The existing lighting includes surface mounted fluorescent units. The existing fire alarm system does not operate properly during fire drills and requires replacement based on current building fire codes. The existing windows, storefronts and exterior doors do not provide efficient thermal insulation.</p> <p>The new scope of work includes removing the existing steam piping and all associated components including condensate return pumps, storage tanks outside of the crawl space. This components will be replaced with new heat exchanger for steam boilers, new air cooled chiller and all associated pumps, etc. The scope of work will include installation of two (2) gas fired rooftop units for the multipurpose room, one (1) 10 ton variable air volume type packaged rooftop unit for the admin and health suites with associated terminal units, thirty-two (32) dual temp hydronic unit ventilators, seven (7) ceiling mounted electric heaters for single occupancy toilet rooms, five (5) floor mounted fan coil units for corridors and four (4) recessed wall hot water convectors. The new 2-pipe hydronic piping shall be installed above the ceilings. The boiler rooms will require abatement of floor tiles and HVAC insulation. The domestic water piping will be replaced above ceiling, replacing all lavatories, sinks, bubblers and water coolers. All steam and domestic water piping in the crawl spaces will be drained down and abandoned in place. All major equipment will include new electrical connections and emergency. This project will include a ceiling system with new grid, tile and LED light fixtures. In addition, the work will require a full upgrade to the fire alarm system and installation of a full sprinkler system to meet current code requirements.</p> <p>The existing pneumatic controls system shall be replaced with Fully Open Tridium/Niagara AX System. All new equipment will have a rib relay with HOA and placed on our existing Energy Management System that is a Tridium Server, version 4.0. The remaining HVAC equipment shall be retrofitted with the new controls system. The new system would provide the ability to heat and cool simultaneously year round. The controls upgrade will allow for better monitoring and management of HVAC systems.</p> <p><u>Building Envelope Component System (Doors, and Windows)</u> The exterior wall enclosure will be replaced to provide upgraded insulation to maintain indoor air quality, temperature, humidity and minimize moisture. This will provide energy efficiency and enhanced sustainability. The replacement of the existing windows and doors are necessary as this original building system has exceeded its service life causing repeated work orders and safety concerns. The scope includes the following items:</p> <ol style="list-style-type: none"> 1. The removal of thirty one (31) existing window units and will replaced with commercial grade single hung aluminum windows with double insulated units including, which will receive new flashing and metal cladding of exposed surfaces. 2. The removal of twenty-nine (29) existing exterior doors, door- frames to be replaced with commercial grade hollow metal doors and frames. This will include new hardware panic devices, lock hardware, closers, pulls, door sweeps, thresholds etc. The replacement is necessary as the exterior doors have exceeded its service life causing repeated work orders and safety concerns. 	\$2,900,000

	PROJECT	DESCRIPTION & JUSTIFICATION	FY 19 COUNTY FUNDING REQUEST
17	James Madison HS & HVAC Building Envelope Modernization	<p><u>HVAC System</u> The existing HVAC system was installed when the original building was built in 1970. The existing HVAC system consists of two dual fuel (oil/gas) hot water boilers and a water cooled chiller/cooling tower connected to a 4-pipe system. The downstream unitary equipment includes three large air handling units, mixing boxes, finned tube radiators, and convectors. The controls are pneumatic and not centrally controlled by an energy management system. The existing lighting includes surface mounted fluorescent units. The controls are pneumatic and not centrally controlled by an energy management system. The windows, doors and storefronts are single pane uninsulated units and do not provide efficient thermal insulation. The new scope of work includes replacing the HVAC piping system, chiller, cooling tower, four (4) air handling units, 96 mixing boxes, twenty (20) finned tube radiators, fifteen (15) convectors, and controls. The existing system has exceeded its useful life, mechanically problematic throughout the facility, and due to pneumatic system issues is unable to be controlled. The existing chiller and cooling tower are oversized for the building. The overcooling is causing the building to retain excessive condensation and rooms have begun to mold. A double duct air distribution system requires air handlers that must be custom built to replace and is very costly to operate because of the number of fans that are required to operate non-stop for on demand heating and cooling. The exterior of the building is stained from condensation weeping out of the bricks. The new variable air volume terminal boxes with hot water reheat shall replace the obsolete mixing boxes. There will be two (2) new variable type air handlers to replace the double duct type custom air handling units and a new constant volume air handling unit shall replace the original gym air handling unit. The existing split system in the admin area shall be replaced in kind. The windows, doors and storefronts are single pane uninsulated units and do not provide efficient thermal insulation. The existing pneumatic controls system shall be replaced with Fully Open Tridium/Niagara AX System. All new equipment will have a rib relay with HOA and placed on our existing Energy Management System that is a Tridium Server, version 4.0. The remaining HVAC equipment shall be retrofitted with the new controls system. The new system would provide the ability to heat and cool simultaneously year round. The controls upgrade will allow for better monitoring and management of HVAC systems.</p> <p><u>Building Envelope Component System (Doors, Windows, and Storefronts)</u> The exterior wall enclosure will be replaced to provide upgraded insulation to maintain indoor air quality, temperature, humidity and minimize moisture. This will provide energy efficiency and enhanced sustainability. The replacement of the existing windows and doors are necessary as this original building system has exceeded its service life causing repeated work orders and safety concerns. The scope includes the following items:</p> <ol style="list-style-type: none"> 1. The removal of seven (7) existing store front system and replace it with a commercial grade aluminum window wall and paneling systems. The glazing will consist of LOW-E Glass with replaceable extruded rubber. The storefront doors will receive entrance doors including; aluminum vertical and horizontal fabrication including new hardware such as new panic devices, lock hardware, closers, pulls, door sweeps, thresholds etc. This will include new flashing and metal cladding of exposed surfaces. 2. The removal of one hundred and thirty eight (138) existing window units and will replaced with commercial grade single hung aluminum windows with double insulated units including, which will receive new flashing and metal cladding of exposed surfaces. 3. The removal of twenty four (24) existing exterior doors, door- frames to be replaced with commercial grade hollow metal doors and frames. This will include new hardware panic devices, lock hardware, closers, pulls, door sweeps, thresholds etc. 	\$3,855,000

	PROJECT	DESCRIPTION & JUSTIFICATION	FY 19 COUNTY FUNDING REQUEST
18	Patuxent ES HVAC & Building Envelope Modernization	<p><u>HVAC System</u> The existing HVAC system was installed when the original building was built in 1971 with a pod conversion in 2000. A gym and recreation center was added in 2002 and is operated by parks and planning. The existing school HVAC system consists of two dual fuel (oil/gas) hot water boilers and a rooftop air cooled chiller connected to a 2-pipe system. This chiller has had repeated refrigerant leaks, component failures and hail damage and charged with R-22 type refrigerant. The downstream unitary equipment includes unit ventilators and air handling units. There are two air handlers in the facility. The unit serving the multipurpose room is connected to the 15 ton condenser on the roof and must be replaced along with the outdoor unit. The second air handler is located in a corridor storage closet. The system also includes four (4) rooftop units for classroom outside air and two (2) rooftop units for offices and the media center. The multipurpose room is served by a 15 ton split system. The existing rooftop units and condensing unit have extensive refrigerant leaks, irreversible hail damage, and multiple compressor replacements. In addition, these units are also charged with R-22 type refrigerant. The existing fan coil units have had multiple coil ruptures resulting in extensive coil damage. The existing controls are pneumatic and not centrally controlled by an energy management system. The windows and doors are single pane uninsulated units and do not provide efficient thermal insulation.</p> <p>The new scope of work includes replacing the existing hydronic piping system, air cooled chiller, two (2) air handlers, one (1) 15 ton condensing unit, twenty-two (22) fan coil units, five (5) finned tube radiators, eight (8) convectors, six (6) rooftop units, and controls.</p> <p>The existing pneumatic controls system shall be replaced with Fully Open Tridium/Niagara AX System. All new equipment will have a rib relay with HOA and placed on our existing Energy Management System that is a Tridium Server, version 4.0. The remaining HVAC equipment shall be retrofitted with the new controls system. The new system would provide the ability to heat and cool simultaneously year round. The controls upgrade will allow for better monitoring and management of HVAC systems.</p> <p><u>Building Envelope Component System (Doors, & Windows)</u> The exterior wall enclosure will be replaced to provide upgraded insulation to maintain indoor air quality, temperature, humidity and minimize moisture. This will provide energy efficiency and enhanced sustainability. The replacement of the existing windows and doors are necessary as this original building system has exceeded its service life causing repeated work orders and safety concerns. The scope includes the following items:</p> <ol style="list-style-type: none"> 1. The removal of fifty nine (59) existing window units and will be replaced with commercial grade single hung aluminum windows with double insulated units including, which will receive new flashing and metal cladding of exposed surfaces. 2. The removal of twenty nine (29) existing exterior doors, door- frames to be replaced with commercial grade hollow metal doors and frames. This will include new hardware panic devices, lock hardware, closers, pulls, door sweeps, thresholds etc. The replacement is necessary as the exterior doors have exceeded its service life causing repeated work orders and safety concerns. 	\$2,194,000
19	Chillum ES Open Space POD Conversion (2 PODs)	<p>The original school building was built in 1954 with additions in 1963, 1979 and 1994. Currently, there are a number of schools in Prince George's County that have open classroom pods. This proposed project will provide funding for the conversion of existing open space pods into conventional classrooms. The open classroom pod environment, a popular teaching concept of the 1960's and 1970's, has become an impediment to learning in today's environment. Students in these pods experience high levels of noise and distraction. Where partitions have been installed to create conventional classrooms, an improvement in student achievement and behavior has been observed. This project will provide for the conversion of four existing pods (1952 and 1955 building) into conventional classrooms. This project will also include minor alterations to the building's structure or utility service that may be required to accommodate the mechanical and electrical equipment that will support air-conditioning for the renovated space. The interior corridors that link the open space pods will also be renovated. Mechanical systems serving the building include two steam boilers feeding a 2-pipe system. Downstream equipment includes Steam Heating Coils, Air Handling Units (AHUs), Electric and Steam Cabinet Unit Heaters (steam in kitchen), Convectors and Classroom Unit Ventilators. Additional equipment in the school includes packaged Roof Top Units (RTUs) in the entire building.</p> <p>The scope of this project includes abandoning the existing steam system in place (including all piping and unit ventilators). The outside air openings in the back of unit ventilators shall be sealed off, demolishing duct mounted steam heating coils, convectors, kitchen cabinet unit heater and multi-purpose room air handlers. Abatement will be done for piping insulation. The scope of the project also includes replacing all Convectors with electric type thru-wall Convectors throughout the school. The kitchen cabinet unit heater will be replaced with an electric ceiling mounted type unit heater. The AHUs in the multi-purpose room will be replaced with ceiling mounted AHUs with a direct expansion cooling coil (connect to existing condensers on roof) and electric heat. RTU-6 and RTU-7 currently are not equipped for fresh air input. These units will be modified to add an economizer. RTU-2, 3 and 4 are multi-zone units. These units will be replaced with new VAV type RTUs and variable air volume boxes will be installed downstream as required to maintain current zoning. Additionally, the existing pneumatic control system will be replaced with Fully Open Tridium/Niagara AX System. All new equipment will have a rib relay with Hand Off Auto (HOA) and placed on our existing Energy Management System that is a Tridium Server, version 4.0. Replacing the steam system will alleviate loss of energy due to steam leaks. A new 4-pipe system would allow for heating and cooling year round. Controls upgrade will allow for more efficient monitoring and management of HVAC systems. Three Pods have (3) classrooms and one Pod has (4) classrooms, for a total of (13) classrooms to be renovated.</p>	\$387,000

	PROJECT	DESCRIPTION & JUSTIFICATION	FY 19 COUNTY FUNDING REQUEST
20	North Forestville ES Roof Replacement	<p>The original 14,716 sq. ft. school building was built in 1954 with the 1st addition of 17,461 sq. ft. built in 1956, the 2nd addition of 5,241 sq. ft. built in 1959, the 3rd addition of 13,389 sq. ft. built in 1966 and the 4th addition of 7,142 sq. ft. built in 1995. The roof to be replaced includes 8,505 sq. ft. of the original building built in 1954, 9,403 sq. ft. for the 1956 addition, 3,288 sq. ft. for the 1959 addition, 6,655 sq. ft. for the 1966 addition and 7,333 sq. ft. for the 1995 addition. The existing roof to be replaced will be approximately 35,184 sq. ft. representing the school portion of the roof and does not include the community center, which is not maintained by PGCPS. The industry standard life of a roof is 20 years; therefore this roof has exceeded the industry standard life and has reached the end of its life cycle. The existing roofing at this facility exhibits deficiencies commensurate with time in service including perimeter leaks/repairs of considerable wear, drain bowl and drain sump leaks, discernable soft spots in the field of the roofing, selective cold process repairs in the field of roofing and base flashing as well as evidence of ponding in front of gutters and drains. Several repairs have been made at expansion joints, pitch pockets and equipment curbs. Please refer to roof inspection reports and/or work orders attached.</p> <p>The existing roof decks for the original building and the additions are poured gypsum over form board except for the 1995 addition, which is metal deck. The new roofing system will consist of one base sheet and 4 felt sheets. The new insulation will be tapered to improve slopes between drains and a ½" perlite board will be installed over the insulation. The desired finish roof slope after the installation of the tapered insulation is ¼" per foot. Additional related items included in the scope includes replacing all drains gutters and downspouts, expansion joints, expansion joint covers, perimeter metal including drip cap and fascia. The existing expansion joints will be replaced and all new expansion joints will have a metal standing seam cover. The existing power roof ventilator curbs will be resized and replaced with new aluminum curbs. All gravity vents will be replaced as a part of this project. There will be new pitch pocket and flashings installed at all equipment flashings. There will be two (2) new aluminum ladders added to improve access and one (1) new aluminum ladder to replace an existing steel ladder. There will be new painted roof hatch to replace the existing with a new ladder-up safety post.</p> <p>All existing perimeter metal (caps, fascia, and soffit) will be replaced with new stucco-embossed aluminum components. Due to the existence of white standing seam wall panels above windows which appear to be in good condition, the color of the perimeter metal at this location will be white to match the existing standing seam panels. All base flashing shall be DynaKap or equal. All existing base flashings will be replaced. Base flashing at perimeter edge details will be the full width 18" wide. At wall caps, install DynaKap up the wall and under the new metal cap. An additional cap sheet layer will be installed along all perimeter cants and gravel stops 18 inches wide. An additional cap sheet layer will be installed along all built-up roof ridges (high points) and along all built-up roof valleys (low points).</p> <p>The amount of tapered insulation used may be restricted by the existing roof structure's weight limitations, disposition of the drains and site specific conditions such as low window sill at roof surfaces. At low parapets where the addition of tapered insulation to improve slope to drains will build to a height at the roof perimeter higher than the existing parapet cap, the cap may be eliminated in favor of a drip edge and two part fascia to cover perimeter wood blocking installed to the height of the insulation.</p> <p>At high parapets over 18" above the finished roof deck, standing seam panels will be used as counter flashing in addition to the base flashing. In addition, an add-alternate will be included in the bid to replace all power roof ventilators. All work not related to the roofing system will be funded using Local Funds only.</p>	\$447,000

	PROJECT	DESCRIPTION & JUSTIFICATION	FY 19 COUNTY FUNDING REQUEST
21	Bladensburg ES Roof Replacement	<p>The 62,050 sq. ft. school building was built in 1990 with no addition. The existing roof on this building was installed in the original year of 1990 and is approximately 27 years old. The industry standard life of a roof is 20 years; therefore this roof has exceeded the industry standard life and has reached the end of its life cycle.</p> <p>The existing roofing at this facility exhibits deficiencies commensurate with time in service including perimeter leaks/repairs of considerable wear, drain bowl and drain sump leaks, discernable soft spots in the field of the roofing, selective cold process repairs in the field of roofing and base flashing as well as evidence of ponding in front of gutters and drains. Several repairs have been made at expansion joints, pitch pockets and equipment curbs. Please refer to roof inspection reports and/or work orders attached.</p> <p>The scope of work includes demolition of existing built-up roofing and insulation, provision and installation of approximately 65,312 gross sq. ft. of new built-up roofing and insulation on the existing roof deck at a ¼” per sq. ft. with new tapered insulation crickets between the drains. A ½” perlite board will be installed on top of the roof insulation. This project will include the entrance canopy built during the same time as the main building in 1990. This is a standing seam metal roof of approximately 1,006 gross sq. ft. and will also be replaced with a similar standing seam roofing material. Additional related items included in the scope includes replacing all drains gutters and downspouts, expansion joints, expansion joint covers, perimeter metal including drip cap and fascia. There will be additional expansion joints installed to break up the larger classroom area roof. The two added expansion joints will travel from the corners of the courtyard to the outside corners (approximately 90 LF each). The existing power roof ventilator curbs will be resized and replaced with new aluminum curbs. All gravity vents will be replaced as a part of this project. There will be new pitch pocket and flashings installed at all equipment flashings. There is a new painted roof hatch to replace the existing with a new ladder-up safety post.</p> <p>The bid will include the re-insulation of all ductwork with 1.5” rigid duct board and covered with EPDM. All deteriorated existing rooftop ductwork will be replaced, as necessary. In addition, an add-alternate will be included in the bid to replace all power roof ventilators. All work not related to the roofing system will be funded using Local Funds only.</p>	<p>\$783,000</p>
22	Greenbelt ES Roof Replacement	<p>The 67,500 sq. ft. school building was built in 1993 with no additions. The existing main built-up roof is approximately 51,237 sq. ft. was installed in the original year of 1993 approximately 24 years old. The balance of the roof is standing seam approximately 20,173 sq. ft., which will remain. The industry standard life of a roof is 20 years; therefore the built-up roof has exceeded the industry standard life and has reached the end of its life cycle. Roof inspection reports indicate that the entire roofing system at this location has reached the end of its life span requiring frequent repairs. The existing roofing at this facility exhibits deficiencies commensurate with time in service including perimeter leaks/repairs of considerable wear, drain bowl and drain sump leaks, discernable soft spots in the field of the roofing, selective cold process repairs in the field of roofing and base flashing as well as evidence of ponding in front of gutters and drains. Several repairs have been made at expansion joints, pitch pockets and equipment curbs. Please refer to roof inspection reports and/or work orders attached.</p> <p>The existing roof deck is ¼” per foot slope and will receive new insulation will with tapered insulation perimeter crickets between drains. A ½” perlite cover board will be installed over the new insulation. The formal design may result in more insulation being applied after structural evaluation is performed to determine the allowable weight for additional insulation. All perimeter soffits above windows and doorways will be replaced with new stucco embossed, perforated, flush-seam aluminum soffits. All new perimeter soffits will match existing metal color – hunter or forest green. The three large soffit areas at the front of the building including the area above the Can Room will be replaced with new stucco embossed, perforated, flush-seam aluminum soffits. The high clear-story Main Entrance soffit will not be replaced. The new front of school soffit areas will match the existing metal color – hunter or forest green.</p> <p>Additional related items included in the scope includes replacing all drains gutters and downspouts, expansion joints, expansion joint covers, perimeter metal including drip cap and fascia. The existing expansion joints will be replaced and all new expansion joints will have a metal standing seam cover. The existing power roof ventilator curbs will be resized and replaced with new aluminum curbs. All gravity vents will be replaced as a part of this project. There will be new pitch pocket and flashings installed at all equipment flashings. The existing galvanized steel ladders will remain. There will be two (2) new painted roof hatches to replace the existing with a new ladder-up safety post. Replace two (2) equipment screens at the energy recovery units with approximately 260 LF with new aluminum standing seam panels to match existing (hunter or forest green). Replace the damaged and/or missing ice snow guards at the existing painted steel standing-seam panels will be replaced as needed. All rooftop duct work will be re-insulated with 1.5” rigid duct board and covered with EPDM. All deteriorated existing rooftop ductwork will be replaced.</p> <p>An add alternate will be included for the prep, spot priming and painting of the perimeter steel at perimeter soffits with rust inhibitive paint to match the new perimeter soffits. Another add alternate will be included for the replacement of existing and missing soffit mounted lighting fixtures with new LED lighting fixtures. All work not related to the roofing system will be funded using Local Funds only.</p>	<p>\$600,000</p>

PROJECT	DESCRIPTION & JUSTIFICATION	FY 19 COUNTY FUNDING REQUEST
Benjamin Stoddert MS Renovation/ Replacement	A full renovation/replacement is recommended for Benjamin Stoddert Middle School driven by educational adequacy deficiencies, an inefficient building layout, and the poor condition of the building systems. Stoddert MS was identified as having critical systems deterioration and therefore prioritized to be among the first schools to be addressed in the PGCPS modernization program. The current SRC is 808 with a projected 2023 enrollment of 621. With 6th grade realignment from the elementary school feeders, middle schools in this planning area are projected to have increased enrollment. The adopted Educational Facilities Master Plan (EFMP) recommends a total of 123,862 Sq. Ft. (22,000 additional SF) for a maximum core capacity of 800. The final capacity will be determined following a planning study to consider the need for boundary changes to determine future enrollment following grade realignment. The FY2018 request is for State planning approval and local planning funds to develop a school specific educational specification, conduct a feasibility study, finalize design capacity, contract for environmental studies, and, to the extent possible, begin the design process. State Planning will be requested in the FY20 CIP.	\$500,000
Kenmoor MS Renovation/ Replacement	A full renovation/replacement and addition is recommended for Kenmoor Middle School driven by educational adequacy deficiencies, poor condition of the building systems, and overutilization. The current SRC is 695. With 6th grade realignment from elementary school feeders, Kenmoor has a projected 2023 enrollment of up to 920 students. The adopted Educational Facilities Master Plan (EFMP) recommends rebalancing the middle school enrollment in this planning area to reassign students from adjacent middle schools to Kenmoor. Using the Board-adopted prototypical educational specifications, the EFMP recommends a total of 170,381 Sq. Ft. (42,000 additional SF) for a maximum core capacity of 1200. The final capacity will be determined following a planning study to consider the need for a boundary change to determine the future enrollment. The FY2018 request is for local planning funds and State planning approval to develop school specific educational specifications, finalize design capacity, conduct a feasibility study, contract for environmental studies, and, to the extent possible, begin the design process. Sate Planning will be requested in the FY20 CIP.	\$500,000
State Funding Request Subtotal		\$101,364,332

PROJECT	DESCRIPTION & JUSTIFICATION	FY 19 COUNTY FUNDING REQUEST
County Funded Projects		
Compliance Mandate Projects		
Asbestos Ceiling Tile Replacement	This project provides funding for the abatement and replacement of all asbestos ceiling tiles throughout the school system. New ceiling tiles will improve the learning environment of the schools and help prevent any potential incidents involving asbestos exposure. New tiles will also make a large improvement in the schools appearance. Many of the existing tiles that contain asbestos are stained from age or roof leaks and cannot be replaced piece meal.	\$1,450,000
American with Disabilities Act (ADA) Projects	This project category will request funding to address ADA improvements at all school buildings. In May 2008, the updated Facility Assessment Study of 184 existing school facilities was completed. The current needed repairs total \$2.12B, of which \$31.7M was analyzed as ADA improvements that are required. As we proceed to the next phase, each school will be prioritized based on the FCI, and would be included in the prioritized ADA list of projects. The ADA was signed into law to provide greater accessibility to physically-challenged Americans by updating existing buildings and ensuring that all new buildings provide barrier-free access. Failure to address the deficiencies in our school buildings imposes hardships on users with disabilities and opens the possibility of litigation. All Prince George's County Public Schools were originally built to comply with the codes and building standards in effect at the time of design and construction. Annual inspections of our facilities continue to identify life safety conditions that fail to meet present codes. To meet this need, County funds have been requested on an annual basis. A six year capital plan is proposed to address the ADA findings in the updated Facility Assessment Study.	\$1,500,000
Buried Fuel Tank (Underground Storage Tanks) Replacement	This project provides funding for replacing buried heating and minor fuel tanks that are leaking or have deteriorated past the point of repair. All buried tanks over 15 years old will need to be replaced. Replacement tanks will be made of corrosion-resistant materials, and will be installed with monitoring wells and other safeguards designed to meet environmental and safety standards. Funding will be used for tank testing, mandatory upgrades, tank replacements, site remediation, cathodic protection, and temporary procurement. There are currently 263 operational buried fuel tanks on property owned by the Prince George's County Public Schools. Of these, approximately 130 are 20 or more years old. A number of the tanks tested to date have shown evidence of leaks indicating the need for replacement. The cost of such replacements is approximately \$100,000 per tank.	\$1,400,000
Lead Remediation Projects	This project provides funds to remediate possible lead from drinking water and to meet EPA standards. All code requirements were met at the time the schools were built, however EPA codes have continued to be upgraded.	\$3,000,000
Fire Alarm, Fire Hydrants – Code Corrections	This project consists of updating a number of existing school buildings to meet current County, State and Federal building codes. Top priority will be given to the fire hydrant line extensions and the remaining funding will be used for other pending high-priority needs. All code requirements were met at the time the schools were built; however, codes have continued to be upgraded. New fire, health, safety and handicap codes require alterations to correct	\$2,860,000
CFC Control and A/C Modernization	This project provides funding to retrofit or replace aging air-conditioning equipment with the goal of eliminating the use of CFC-based refrigerants by the year 2008. Immediate action will be taken to reduce the release of CFC compounds by installing high efficiency purge pumps on large central chillers. Central chillers will be evaluated on a case-by-case basis to determine whether conversion, renovation, or replacement, is most appropriate. In addition to the central chillers, the project will include rooftop units, absorption systems and cooling towers. Many of the large central chillers in our schools have exceeded recommended maintenance of effort. The designed lifetime for the rooftop air-conditioning equipment is approximately 15 to 20 years, and most of the rooftop units have already outlived their life expectancy.	\$2,000,000
Compliance Mandate Projects Subtotal		\$12,210,000

PROJECT	DESCRIPTION & JUSTIFICATION	FY 19 COUNTY FUNDING REQUEST
Other County-Wide Projects		
Air Condition Upgrades (in major projects)	This project category will request funding to complete air-conditioning in classrooms, multi-purpose rooms, and other instructional rooms in elementary, middle, and high schools, as well as other instructional facilities. There remains a need to complete air-conditioning in several other instructional rooms in elementary, middle, and high schools, as well as other instructional facilities.	\$102,030,000
Central Garage/ Transportation Dept. Improvements	This project seeks to improve bus and vehicle service areas at several locations. A feasibility study will be conducted to develop a phased program to improve working conditions at these facilities, enhance worker productivity, and to provide safer working conditions. Fully-enclosed service sheds will be provided at several bus lots. There is a critical need to provide the bus lot mechanics with workspace that affords protection from the elements. These work stations will eliminate the need to transfer buses from bus lots to one of the three garages for repairs.	\$4,000,000
Kitchen and Food Services	This project includes short-term and long-term capital improvements to the food service facilities and equipment. This project would allow the Department of Food and Nutrition Services to design a best use plan for new or renovated kitchens, and to develop new and efficient delivery systems to achieve maximum output within a minimum amount of space using minimum amount of labor.	\$2,865,000
Land and Building Acquisition	This project provides funding to purchase land and buildings for new schools.	\$8,000,000
Major Emergency Repairs	This project provides funding for the repair and replacement of track surfaces, bleachers, lockers, boilers, HVAC/electrical systems, elevators, energy projects, environmental issues, repaving, painting, roof/structural systems, emergency repairs, and expense associated with meeting federally-mandated regulations. The average of the school buildings is approximately 40 years and the support systems have exceeded their life expectancy. Consequently, there has been a marked increase in mechanical, electrical and structural component failures. The cost of either planned replacements or emergency repairs, for such items far exceed provisions in the annual maintenance operating budget.	\$11,368,000
Parking Lots/ Driveways	This project provides funding for additional entrance/exit drives, vehicle turnarounds, bus awaiting areas, sidewalks, and parent drop-off/pick-up areas at various school sites to accommodate the increased volume of traffic and improve on-site safety. Most schools were built when a majority of students walked to school and driveways were designed to handle only staff and visitor parking with a limited number of school buses. With the increase in school bus traffic, and the number of parents transporting children to and from school, driveways often cannot handle the traffic volume. This situation has resulted in congestion during arrival and dismissal times.	\$5,671,000
Playground Equipment	This project provides funding to replace or provide new playground equipment. Many school facilities have playground equipment that has aged and is in need of repair or replacement.	\$750,000
Security Upgrades	This project will provide for a six year capital plan to provide a security camera infrastructure plan for the elementary, middle, high, and other school facilities in Prince George's County. Due to theft and vandalism, break-ins, student needs and overall security, the requested funding will provide the necessary equipment and infrastructure.	\$4,500,000
State Planning Projects	This project provides the necessary funding to support capital projects that require both State construction funding and county funding to complete the design prior to the approval of State funds. Projects in this category include Open Space Pods, Systemics and other renovation type projects. By programming projects concurrently, this leads to a more expedient commence toward construction, once State funding is received.	\$7,500,000

PROJECT	DESCRIPTION & JUSTIFICATION	FY 19 COUNTY FUNDING REQUEST
SAFE PASSAGES TO SCHOOLS (SPS)	<p>SPS is a new project type that replaces 'Parking Lots/Driveways' and 'Playground Equipment and Repairs'. This project combines several previous objectives of the school system into a more comprehensive project type all related to the school site design to include (1) entrance and turn-around for school vehicles and service vehicles; (2) faculty-staff parking; (3) vehicular and pedestrian traffic; (4) grading, drainage, and turf; (5) play areas and green space; (6) walkways; (7) erosion and storm water control; (8) lighting;</p> <p>-Objective 1 (Accessibility) is to connect federal grant funding for Safe Routes to Schools with student safety once students are on school property. SPS projects will address sidewalks and trails on school property to ensure the safety and accessibility of students and other pedestrians.</p> <p>-Objective 2 (Healthy Schools) is to extend walking trails around the school property with trail markers and to upgrade playground areas to further the health objectives of the County and school system.</p> <p>-Objective 3 (Safety): The separation of pedestrian and vehicular drop-off and pick-up of students is a critical safety concern on many school sites. Most schools were built when the majority of students walked to school. With the increase in bus traffic and the number of parents transporting children to and from, schools are experiencing significant congestion during arrival and dismissal.</p> <p>-Objective 4 (Green Space Management): The efficient design of the site (walkways, play areas, bus and vehicular flow) leads to better site management and to opportunities to use the available green space to support education and storm water control.</p> <p>All of the above objectives will create a positive public facility image in the community and neighborhood furthering the PGCPS goal of fostering family and community engagement while maintaining safe and supportive environments that support educational, environmental literacy programming conducive to academic excellence.</p>	\$1,400,000
Future Qualified Zone Academy Bond (QZAB) Projects	Projects TBD	\$1,000,000
Future Aging Schools (ASP) Projects	Projects TBD	\$1,000,000
Other County-Wide Projects Subtotal		\$150,084,000
FY2019 TOTAL REQUEST		\$263,658,332