APPENDIX B

SPOTLIGHT ON FAIRFAX COUNTY PUBLIC SCHOOLS



OVERVIEW

This Spotlight describes recent achievements by Fairfax County Public Schools (FCPS) and upcoming plans for Get2Green; energy; transportation; and potable water. As available, it identifies specific schools and facilities where achievements have taken place. The Spotlight includes comments and recommendations about opportunities to improve environmental performance for FCPS.

FCPS is one of the largest school divisions in the United States, serving a diverse community of more than 183,000 students with 199 schools and centers. FCPS has multiple departments and offices that have activities relevant to environmental topics. These include Facilities and Transportation Services; Food and Nutrition Services; Instructional Services; Office of Design and Construction; Office of Facilities Management; and Office of Safety and Security. In July 2021, the FCPS Board accepted recommendations from the Joint Environmental Task Force (JET) surrounding energy, transportation, waste reduction, and workforce development for the school division (https://www.fcps.edu/news/fairfax-county-school-board-sets-goal-carbon-neutral-energy-use-2040).

Commitments by the FCPS Board include:

- Being energy carbon neutral by 2040.
- Achieve 50% emissions reductions by 2030, as compared to a 2019 baseline.
- Produce 25% of the county energy use from in-county renewable energy generation by 2030, and 50% by 2040, using 2019 energy use as the baseline.
- Decrease total energy usage from all county facilities by 25% by 2030, and 50% by 2040,
- as compared to the 2019 baseline.
- All new county buildings and major renovation projects beginning planning and design in 2021 and after must achieve Net Zero Energy (NZE) performance as defined below, unless county staff advises the Board prior to the 30% design phase why a project cannot meet the NZE standard. The JET defines an NZE building as one that is highly energy-efficient and produces onsite, or procures offsite as necessary, carbon-free renewable energy in an amount sufficient to offset the annual energy use associated with operations.
- Transition to electric or zero-carbon alternatives for school buses and eligible fleet vehicles by 2035; and to develop a plan to fuel the electric vehicles using non-carbon emitting fuels and carbon offsets with a complete transition to 100% clean fuel by 2030.
- FCPS and the County coordinate electrification efforts and share charging and maintenance infrastructure whenever possible.
- Achieve Zero Waste in county and school operations by 2030.
- Equip FCPS guidance counselors and career center staff with a standardized tool kit for talking with students about the range of green careers and the background necessary to

enter those careers. Ensure the presence of green career professionals in career days and student interview days.

- Develop a comprehensive plan to offer one or more green career/economy-related programs for high school students to encourage participation in this emerging job market.

Get2Green

Get2Green is the environmental stewardship program for FCPS. It supports division-level policies and projects that complement school-based sustainability work based on a foundation of equity. Get2Green offers guidance and resources for classes and eco-teams implementing handson environmental action in their school and community. Get2Green's website (https://get2green.fcps.edu/index.html) provides a variety of dashboards with school-specific and county-level data on energy use and recycling (see example on energy use in Figure B-1 and recycling in Figure B-2). Get2Green staff has developed a comprehensive garden guide, *Together We Grow*, that will be available for SY2024-2025 to support schools in working with students to design, plant and maintain garden spaces. FCPS staff are working on a new garden guide for the 2023-24 school year.

Get2Green expanded their programs in FY 23, and FY 24, and FY 25. In FY 23, Get2Green added a support specialist and program manager. In FY 24, they added 4 resource teachers and provided a salary supplement for a Get2Green leader in every K-12 school and center. In FY25, Get2Green added a fifth resource teacher, is hiring a Business Operations Assistant, and is providing schools with dedicated funding to support their outdoor learning spaces and gardens. Overall, Get2Green has_1 XXX staff members in Facilities and YYY 9 in Instructional Services. The Get2Green staff collaborates with county and community partners, serves on committees supporting sustainability in FCPS and across Fairfax County including the joint County and Schools Zero Waste team, applies for and manages grants to support schools, and hosts programs such as Earth Week to expand engagement in environmental stewardship. Get2Green provides professional development opportunities for educators and administrators to ensure all students have opportunities to develop as ethical and global citizens. However, it does not appear that FCPS has developed a plan to act on the JET recommendation to prepare students to contribute to the range of green careers including technical jobs such as for solar installation and maintenance.

Energy

The FCPS Energy Education Team includes all students, staff, parents, and other community members who make up the totality of individuals who use FCPS sites. Energy Education Specialists are the FCPS employees tasked with involving all members of the FCPS Energy Education Team and focusing team member's efforts towards accomplishing their goals. FCPS has 10 full-time and four hourly Energy Education Specialists to perform energy management, conservation, and educational services.

In FY 2023, FCPS spent about \$41,000,000 on its electric, oil, gas, and water utilities. A review of data on energy costs presented in the Get2Green dashboard shows a cost increase of approximately 24% when comparing 2019 to 2023. Electricity use between 2019 and 2023 was

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Commented [RW1]: Please comment on the extent to which this is accurate. If such a plan exists, please identify how it can be viewed by EQAC.

Commented [VDO2R1]: Rachael Domer, CTE, and Matt Bechtel are the contacts for this JET recommendation

Commented [VDO3R1]: While we support this initiative, it is not in the purview of Get2Green

Commented [RW4]: Additional questions for FCPS staff (copied from e-mail to Ali C on May 13):

1. What progress has been made by FCPS toward the overarching goal of the JET: achieving energy carbon neutrality by 2040? Is FCPS on track to meet that goal and, if not, what can it do to help?

 What progress has been made by FCPS toward achieving a 50% reduction in carbon emissions by 2030, as compared to a 2019 baseline. Is FCPS on track to achieve this goal? Similarly, what progress has been made for the schools to produce 25% of its energy by renewable energy generated within the county. Is FCPS on track towards this goal? The JET set as a goal decreasing total energy usage by 25% by 2030. Where is FCPS on track towards this goal? Are all new schools being designed to net zero energy?
 What are the FCPS plans to get caught up with having solar on 113 schools? Has FCPS assessed the feasibility of additional solar installations at sites like parking lots?
 Io. (recarding energy use intensity of school buildings)

 What are the plans to accelerate the decline? Has FCPS set maximum energy use intensities (in terms of kBtu/sf/year) for all facilities?

11. What is the status of planning to have schools get a Climate Action Plan? When will it be public, what is the process for gathering community input?

Commented [PC5R4]: We continue to look at renewable energy, we have weekly meeting with solar. We have picked 5 groups of 5 schools per group to get PPA estimates. We have started to install LED in parking lots and coming up with a plan. We are replacing fluorescent lights with LEDs in large areas such as Gyms, cafeterias, and Media areas. Annual report will report savings.

Commented [PC6R4]: We are also set up to meet with our design and construction leaders and aim reaching goals.

Commented [RW7]: Please update the number of fulltime and hourly energy education specialists currently employed by FCPS.

Commented [PC8R7]: This number has not changed

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virtually unchanged, and natural gas use declined by 3%. The Office of Facilities Management is tasked with keeping this bill as low as possible through development and implementation of conservation programs. To contribute to enhancing the pace of energy-related improvements at existing FCPS schools and other facilities, the Office of Facilities Management is in the process of planning Energy Savings Performance Contracts. Such contracts will enable the completion of urgently needed energy improvement projects that have been unfunded due to budget constraints including replacing inefficient HVAC equipment still in use beyond its useful life (e.g., chillers and boilers), old inefficient and poor quality fluorescent and High Intensity Discharge lighting. FCPS is currently not using Energy Savings Performance Contract found at the following URL: https://www.energy.virginia.gov/energy-efficiency/performancecontracting.shtml.

FCPS currently has ten schools with solar installations. Roof-mounted photovoltaic solar arrays paid for through grants and fundraising are located at Rachel Carson Middle School, Frost Middle School, Canterbury Woods Elementary, Bailey's Elementary School, and Thomas Jefferson High School. Roof-mounted solar installations for solar thermal heating of potable (drinkable) water can be found at Glasgow Middle School, West Springfield High School, and Thomas Jefferson High School. Franklin Sherman Elementary has a ground-mounted photovoltaic array. Experimental instructional projects integrating technology include a solar powered wind turbine at Lanier Middle School and a chicken coop with solar panel heat at Twain Middle School. Although these projects do not supply large amounts of energy to the schools, they serve as valuable educational tools. This year, Riverside ES and Jackson MS were selected for the Dominion Energy Solar for Students program. Centreville ES won the award in 2019.

Solar Purchase Power Agreements (PPAs). FCPS is continuing the process of pursuing solar PPAs. No PPA infrastructure has yet to be installed, but two agreements have been signed: one at Mason Crest Elementary School with Sun Tribe, and one at Annandale High School with Ipsun. Dominion Energy Virginia Interconnect requirements are stopping projects due to economic infeasibility all around the state including the FCPS project at Mason Crest Vendor requests to modify the agreement have delayed the FCPS project at Annandale HS – it has not yet met the interconnect requirements problem due to contract negotiations. Uncertainly in the outcome of challenges to the interconnection rules, pending with the State Corporation Commission, has contributed to the delays. Solar PPAs for 9 additional sites have been awarded to Suntribe and are anticipated to be completed within the next 18-24 months (i.e., by July 2026). These are at Annandale Terrace ES, Cherry Run ES, Franklin Sherman ES, Lutie Lewis Coates ES, Mount Vernon Woods ES, Newington Forest ES, Olde Creek ES, Silverbrook ES, and Waynewood ES_These sites are under 250KW each and are not affected by the SCC ruling .

FCPS Facilities. FCPS maintains approximately 28 million square feet of occupied space for education, support, and administration functions. As shown on Figure B-3, Greenhouse Gas (GHG) emissions per unit of occupied space has generally decreased for FCPS over the past 13-year period, with an uptick in 2021 (i.e., the most recent year with available data). This uptick may be due to the impacts of the COVID-19 pandemic which greatly reduced school usage in

Commented [RW9]: Please provide an update on the status of the use of ESPCs.

Commented [PC10R9]: We are working with CMTA and had 5 building audited last fiscal year. We continue to meet with vendors to see different options and what is best for FCPS

Commented [RW11]: Information provided in Dec 2023 FCPS briefing to EQAC by Cliff Pahlavaninejad.

Commented [PC12R11]: We are still looking at education pieces at more sites. The 9 school sites that were approved will offer education plans to staff and kids.

Commented [RW13]: Please advise about the current status of efforts concerning the SCC's preliminary injunction (noted in Oct 2023) stopping the Dominion interconnection rules for now, along with related litigation. As of Oct 23, it was suggested that the outcome was uncertain, and the status of assessing costs retroactively.

Commented [PC14R13]: We continue to reach out to Dominion. At this time we are limited to 250- kw AC per building. Dominion must file a response in detail the requirements to the SCC by 11/15/24

Commented [PC15R13]: Still true, projects that are moving forward are being reduced to under 250 kW to stay below the Dominion interconnect requirements.

Commented [PS16]: Solar PPA's for 9 sites have been awarded to Suntribe and will be completed within the next 18-24 months at Annandale Terrace ES, Cherry Run ES, Franklin Sherman ES, Lutie Lewis Coates ES ,Mount Vernon Woods ES, Newington Forest ES ,Olde Creek ES ,Silverbrook ES ,Waynewood ES .

Commented [RW17R16]: Added

Commented [RW18]: Please provide an updated draft of Fig B-3 (GHG Emissions) including data for more recent years (i.e., 2022, and, as available 2023 and 2024). Please provide the chart in a format suitable for inclusion in the 2024 ARE - EQAC staff can provide specific formatting requirements.

Commented [PC19R18]: <u>C:\Users\cfpahlavanin\OneDriv</u> <u>e - Fairfax County Public Schools\Desktop\Figure B-3.xlsx</u>

Commented [PC20R18]: Added graph below

2020. Further, the declines in energy use may be due to changes in Dominion Energy's fuel for its power stations, reducing coal and increasing natural gas, which likely accounts for much of the 38% reduction in greenhouse gas emissions over the period from 2019-2023. As of 2023, FCPS had GHG equivalent emissions (CO2e) of approximately XXX,000 metric tons, the majority of which were due to indirect emissions from electricity use.

Energy Use Intensity (EUI), the energy use of a building per square foot, has generally been declining across all FCPS facilities over the past 14 years, as shown in Figure B-4. In FY 2022, the EUI of FCPS was approximately 50 kilo British thermal units per square foot (KBtu/SF), compared to 72 KBtu in FY 2008, a 30 percent reduction. These energy reductions (total and per square foot) have been achieved despite the addition of school building space to accommodate increasing student membership. As with Figure B-3, the uptick in FY22 may be due to the impacts of the COVID-19 pandemic.

As required by School Board Policy 8542 (Environmental Stewardship), FCPS has prepared an annual GHG Inventory report; the most recent report is for 2022 (reports for years 2013 through 2022 are available at https://www.fcps.edu/about-fcps/performance-and-accountability/energy-management-program/greenhouse-gas-inventory). In its 2022 report, fugitive refrigerant emissions were removed from GHG reports for FCPS. This was done because it was determined that these data had not been collected in a meaningful way and FCPS does not have a process in place for accurate collection of this type of data (historical reports will remain as previously published).

Mason Crest ES, a repurposed administrative building, uses geothermal energy for heating and cooling. This geothermal system consists of a well field located under the ball fields near the playground. The geothermal system moves heat from the earth into the building in the winter and pulls heat from the building and discharges it into the ground in the summer.

In SY 24, FCPS continued to replace gasoline powered equipment with diesel powered equipment adhering to EPA's Tier 4 emission standard when equipment is due for replacement. They anticipate having more than 50 blowers in operation within a year, and more as the machinery finishes its useful life cycle. They plan to continue replacing gasoline powered hedge clippers to battery powered as they end their useful life cycle.

The reforestation of areas on school sites helps mitigate stormwater runoff by absorbing water. Drought-resistant trees and plants native to this region are used because they are suited for this climate and do not require irrigation. The trees absorb carbon dioxide and assist with improved air quality around the schools. Over 1,500 trees and over 4,100 shrubs were planted by FCPS in 2022 and 2023. With few exceptions, only native and non-toxic fruit bearing vegetation was planted. No invasive species were planted, and in most cases, existing invasive species were removed using procedures prescribed by Fairfax County's Urban Forest Management Department.

Transportation

Commented [RW21]: Please verify the accuracy of this information.

Commented [PC22R21]: In 2023, FCPS achieved a 46% reduction in Greenhouse Gas emissions compared to the baseline year of 2008

Commented [RW23]: To be updated with more recent data.

Commented [PC24R23]: 130,598 Metric tons

Commented [RW25]: Please provide an updated draft of Fig B-4 (EUI) including data for more recent years (i.e., 2023, and, as available, 2024). Please provide the chart in a format suitable for inclusion in the 2024 ARE - EQAC staff can provide specific formatting requirements.

Commented [PC26R25]: Added to bottom of page

Commented [RW27]: Please identify the year this geothermal system began operation at Mason Crest ES.

Commented [PC28R27]: 2012

Commented [PC29R27]: Mason Crest was approved for construction in Fall 2009. A year later construction started and, on September 4, 2012, the school opened its doors.

Commented [RW30]: Please confirm that this was done in 2022 and 2023. According to the Dec 2023 briefing to EQAC by Cliff Pahlavaninejad, it was noted as "in the past 2 years".

Commented [PC31R30]: Since getting this job we are getting more accurate numbers. Waiting for D&C to respond. OFM grounds department has planted over 350 trees in various FCPS locations, working with Urban Forestry, Casey Trees, and the FCPS Grounds department. Only native and non-toxic fruit-bearing vegetation has been planted, and no invasive species were introduced. In cases where invasive species were already present, they were removed using procedures prescribed by Fairfax County's Urban Forest Management Department. We are keeping better track.

Commented [RW32]: Additional questions (from May 13 e-mail to Paul D'Andrade):

16. The JET calls for the county and the schools to develop a 100% Clean Fuel Plan and to make a complete transition to 100% clean fuel by 2030. Has that plan been developed? Where is the county in meeting benchmarks measuring progress toward achieving this goal?

19. What is the extent to which FCPS and Fairfax County have improved safety features and interconnected options for biking and walking (safety features include enhanced lighting, signage, etc), as well as whether biking and walking are better incentivized (as mentioned in the JET report)?

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FCPS has a fleet of 1,625 diesel buses; also 896 cars, vans, and trucks. In school year 25-26, FCPS will have 73 electric school buses in operation. These 73 buses were funded as follows: 8 buses and 4 vehicle-to-grid charging stations by a grant from Dominion Energy (located at the FCPS Stonecroft Transportation Center); 20 buses by grants (two separate grants of 10 each) from Virginia's Department of Environmental Quality (located at the Lorton facility, with charging infrastructure provided by Dominion Energy); 42 buses by the EPA's Clean School Bus Grant (FCPS was notified it had been awarded \$16,590,000 for the 42 school buses on January 2, 2024) (infrastructure and related costs to be provided by Dominion Energy); and 3 buses by FCPS to support the Training Center for training new and existing drivers on electric school bus operation. EQAC notes that the extent to which FCPS is on track for meeting its objective of transitioning to electric or zero-carbon alternatives for school buses and eligible fleet vehicles by 2035 is unclear.

Beginning in 2023, FCPS and the County have installed EV infrastructure locations with other planned locations to be in operation by the end of 2024. Staff from both FCPS and the County are actively planning and mapping out future locations that can be built together to share and to keep costs down where possible. The chargers at these locations for both the County and FCPS are the same manufacturer so all EV vehicles can be charged at all locations.

FCPS' EV program will replace one internal combustion engine vehicle for one electric vehicle so no additional vehicles will be added to the fleet total. Needed infrastructure will be placed in existing parking spaces so no additional parking will be required due to the EV replacement program. A hub box will be added at the end of each charger row for future chargers to be installed saving time and money. FCPS staff have met with vendors and power company for future charging locations at FCPS administration buildings.

A total of 70 FCPS diesel buses have been removed from the fleet and their engines destroyed permanently so they cannot release additional CO2 gases into the atmosphere. At the end of the life of the EV buses, the lithium batteries will be removed, and Dominion Energy will take ownership of the old batteries. Dominion will use the batteries in a solar energy field. These batteries will be charged by solar panels and the power will be stored and used during high energy peak times.

Potable Water

FCPS' Office of Safety and Security (OSS) anticipates completion of the first round of testing for lead (all drinkable sources in each school tested at least once) by the end of the school year in 2023; Virginia code was amended in July 2020 to require notification to parents when results of 10 ppb or greater are obtained. From 2019 through the spring of 2023, FCPS has tested fixtures at 160 schools. Of the 10,011 fixtures sampled, a total of 125 (1.2%) yielded results above 10 ppb, requiring notification. Twenty-seven (27) of those fixtures with elevated results were science faucets fitted with backflow prevention devices. If correcting for the science based fixtures (which should not be used as drinking water sources), the total number of potable water sources with results above 10 ppb drops to 98 (0.97%). OSS pays particular attention to the evaluation and mitigation of lead in drinking water at elementary schools since children aged 6 and younger are at greater risk of health effects from lead exposure. Of the 160 school buildings

Commented [RW33]: Please explain how "school year" differs from fiscal year. For example, FCPS school energy intensity is provided by FCPS staff as fiscal year.

Commented [SP34]: Transportation to provided updated information .

Commented [RW35]: Please provide quantitative data about the number of locations with EV infrastructure to be in operation by the end of 2024.

Commented [PC36R35]: Stonecroft Transportation Center, Lorton Transportation Center, and Sideburn Support Facility

Commented [RW37]: Please verify this has already been completed.

evaluated to date, 120 of them are elementary schools. Of the 7,497 fixtures sampled at elementary schools, 73 (0.97%) yielded lead in water results greater than 10 ppb, requiring notification. FCPS conducts fixture and/or connecting pipe replacement at outlets where samples yield lead in water concentrations of 10 ppb or greater (a threshold 33% below the EPA/VDH requirement for remediation at locations yielding concentrations of 15 ppb or greater).

Potable Water

FCPS' Office of Safety and Security (OSS) successfully completed the first round of comprehensive testing for lead in drinking water (all drinkable sources in each school tested at least once) in early summer 2023. Virginia Code was amended in July 2020 to require notification to parents when sampling results of 10 parts per billion (ppb) or greater are obtained. From 2019 through the spring of 2023, OSS tested 13,538 fixtures at potable sources in 199 FCPS schools. Of the fixtures sampled, a total of 132 (0.098%) yielded results above 10 ppb, requiring parent notification. Twenty-seven (27) of fixtures with elevated results were science faucets fitted with backflow prevention devices, which contain trace amounts of lead due to brass parts. If correcting for the science laboratory fixtures (which should not be used as drinking water sources), the total number of potable water sources with results above 10 ppb drops to 105 (0.78%). Each non-laboratory fixture with results above 10 ppb was remediated, resampled, and placed back in service when passing results were received or, in rare instances when remediation is not feasible due to building age or plumbing configuration, permanently removed from service. (All science classrooms now have "DO NOT DRINK THIS WATER" signage placed near laboratory faucets, and science staff have been reminded of good laboratory hygiene practices, which prohibit eating or drinking in laboratory environments.)

Additionally, the EPA Lead and Copper Rule has a <u>pending revision</u>, with an expected publication date of October 16, 2024. This revised rule will require additional testing at approximately 111 FCPS schools. As such, OSS is currently collaborating with Fairfax Water to comply with additional testing requirements and create a sampling plan, and has already submitted data and a draft sampling schedule for this project.

END FCPS SPOTLIGHT

INSERT FOR SCORECARD Recommendation FCPS 2024-1. "New for 2024"

Develop a comprehensive plan to offer one or more green career/economy-related programs for FCPS high school students to encourage participation in this emerging job market.

Opportunities could include specialized training or certificate programs, job shadowing, internships, and real-world workforce experience in fields such as electric vehicle maintenance, solar panel installation, LEED Green Associate Certification, and sustainable landscaping. Further, that FCPS's plan include use of county buildings as learning tools to install solar panels, and use Net Zero building practices and sustainable building and architecture. **Commented [RW38]:** Please update status of FCPS efforts to address state requirements for potable water.

Commented [CP39R38]: From Issac Roberson, OSS-FCPS' Office of Safety and Security (OSS) anticipates completion of the first round of testing for lead (all drinkable sources in each school tested at least once) by the end of the school year in 2023; Virginia code was amended in July 2020 to require notification to parents when results of 10 ppb or greater are obtained. From 2019 through the spring of 2023, FCPS has tested fixtures at 160 schools. Of the 10,011 fixtures sampled, a total of 125 (1.2%) yielded results above 10 ppb, requiring notification. Twenty-seven (27) of those fixtures with elevated results were science faucets fitted with backflow prevention devices. If correcting for the science based fixtures (which should not be used as drinking water sources), the total number of potable water sources with results above 10 ppb drops to 98 (0.97%). OSS pays particular attention to the evaluation and mitigation of lead in drinking water at elementary schools since children aged 6 and younger are at greater risk of health effects from lead exposure. Of the 160 school buildings evaluated to date, 120 of them are elementary schools. Of the 7,497 fixtures sampled at elementary schools, 73 (0.97%) yielded lead in water results greater than 10 ppb, requiring notification. FCPS conducts fixture and/or connecting pipe replacement at outlets where samples yield lead in water concentrations of 10 ppb or greater (a threshold 33% below the EPA/VDH requirement for remediation at locations yielding concentrations of 15 ppb or greater).

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FIGURES FOR FCPS SPOTLIGHT Figure B-1. Example of Energy Dashboard from Get2Green.

Source: https://get2green.fcps.edu/energy db.html; downloaded July 8, 2024.

Alt Text: This figure shows examples of the types of data provided by the Get2Green energy dashboard for four example schools comprising Aldrin Elementary School, Annandale High School, Annandale Terrace Elementary School, and Archer Elementary School, as well as a pie chart showing 12 month commodity cost for the district as a whole covering the period of January 2023 through July 2024. The 12 month commodity cost shows that electricity is the largest slice of the pie, capturing more than three-quarters, with natural gas the second most.

Welcome to the Get2Green Energy D FCPS. Because data is generated from FCPP gas bills are recorded within the previ is for the year to date (so far), please Hover your computer's curser over pi Your may use the sidler barw with the c	Dashboard ③ S' utility bill information ious 30 to 60 days, and keep that in mind as yo ie, bar, and line charts to ircles on either end to a	, the most rec water bills rec ou compare ye o display data. ediust the time	ent 90 days corded withi ars. range displ	of data n in the prev laved in b	nay be incomplete. Most electricity and natural rious 90 days. Annual data for the current year ar charts.	FCPSGet 2
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ENERGY STAR 🗇				2	12 Month Commodity Cost ⊙	2
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ENERGY STAR Building Aldrin Elementary School Annandale High School	Submission type Manual Manual	Area 97,436 ft² 340,055 ft²	Month Apr 2024 Mar 2024	Sco *	12 Month Commodity Cost 💿	Electric Natural Gas Sewer
ENERGY STAR (*) Building Aldrin Elementary School Annandale High School Annandale Terrace Elementary School	Submission type (Manual) (Manual) (Manual)	Area 97,436 ft² 340,055 ft² 101,044 ft²	Month Apr 2024 Mar 2024 Mar 2024	and Sco € 5 5	12 Month Commodity Cost ⊙	Electric Natural Gas Sever Water Old #2
ENERGY STAR ③ Building Aldrin Elementary School Annandale High School Annandale Terace Elementary School Archer Elementary School	Submission type Manual Manual Manual Manual	Area 97,436 ft² 340,055 ft² 101,044 ft² 115,973 ft²	Month Apr 2024 Mar 2024 Mar 2024 Apr 2024	Sco A	12 Month Commodity Cost 📀	Electric Natural Gas Sever Water Oll #2 Other
ENERGY STAR	Submission type Manual Manual Manual Manual	Area 97,436 ft² 340,055 ft² 101,044 ft² 115,973 ft²	Month Apr 2024 Mar 2024 Mar 2024 Apr 2024	xxx Scol € € € €	12 Month Commodity Cost ()	 Electric Natural Gas Sever Vater Oit #2 Other

Figure B-2. Breakdown of Use of Recycling and Trash by FCPS in Years 2023 and 2024.

Source: https://get2green.fcps.edu/recvcle_db.html; downloaded July 8, 2024. Alt Text: This graphic shows the weight of recycling and trash by FCPS by month for all of 2023 and the first three months of 2024. Overall it shows FCPS recycling as 17.4% and trash as 82.6%; the total weight of recycling for that time period is 5,958,405 pounds and trash is 28,231,460 pounds. The graphic shows the percent that is recycling varying by month with the lowest as approximately 300 pounds in July 2023 and the highest as approximately 800 pounds in June 2023. The graphic also shows that data can be selected for one or more specific FCPS locations.



Figure B-3. Greenhouse Gas Emissions and Occupied Space in FCPS Facilities

Source: E-mail from Ali Culhane, FCPS Coordinator, Get2Green, June 12, 2023. Alt Text: This figure shows the generally decreasing annual trend in Greenhouse Gas Emissions from 2008 through 2021 based on total square feet and by emission type such as direct combustion, mobile combustion, and fugitive refrigerants. It overlays these data against the generally increasing annual trend in Occupied Space in FCPS facilities over those same years.



Commented [RW40]: See request above for FCPS to provide an update chart showing GHG emissions through at least 2022 and preferably through 2023 as available (even better if full year 2024 available).





Figure B-4. FCPS Energy Use per Square Foot and Number of Square Feet.

Source: E-mail from Ali Culhane, FCPS Coordinator, Get2Green, May 31, 2023. Alt Text: This figure shows the generally increasing annual trend in building energy use from fiscal years 2008 through 2022 based on KBTU/square feet, ranging from less than 30 in fiscal year 2008 to more than 70 in fiscal year 2022. **Commented [RW41]:** See request above for FCPS to provide an update chart showing energy use per square foot through at least 2023 and preferably through 2024 as available.



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