Alexandria City Public Schools

SNS FACILITIES AND EQUIPMENT ASSESSMENT

EXECUTIVE SUMMARY



EVERY STUDENT SUCCEEDS

EXECUTIVE SUMMARY

Alexandria City Public Schools (ACPS) retained a team of consultants to do an equipment and kitchen assessment at ten of its schools. Brailsford & Dunlavey (B&D), Birchfield Jacobs Foodsystems (BJF), Cox Graae Spack Architects (CGS), and Potomac Energy Group (PEG) collaborated on the project. The study's results presented below are based on the data and information provided by ACPS and the conditions in the various schools at the time of the on-site research. The assessment covered four broad categories related strictly to the foodservice programs:

- Operations
- Equipment
- Facilities and safety
- Mechanical, electrical, and plumbing systems

Detailed findings for each school are contained in the attached ten reports and appendices. In addition to preparing its findings and recommendations, the project team developed preliminary budgetary cost allowances. Economies of scale can be achieved if schools are bundled. ACPS will need to address total costs once a decision is made to proceed, and whether they will be one project or multiple separately-bid projects. The project team has prioritized the order in which the schools should be addressed based on present information. This can change as other factors come into play such as population shifts due to redistricting.

PURPOSE STATEMENT

"The assessment will provide a foundation to understand the current state of kitchens and cafeterias at ten schools not slated for renovation in the near future. The analysis will provide the understanding for recommendations ranging from operational initiatives to equipment replacement. This will support the school nutritional program provided at these schools, including the ability for them to provide nutrient-rich foods in accordance with federal regulations in a way that encourages students to participate. The assessment will assess problems facing the program, its adaptation, as well as provide insight into ways to enhance operations and ensure safety at each school. In addition, the assessment will address cafeteria capacities needed to serve the growing student populations, and the aesthetics of these environments."

Purpose identified in kick-off meetings.

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RESEARCH PROCESS

The conclusions drawn in schools' reports are a result of the following research conducted by the project team:

- Met with the district administration to discuss the study's overall plan and objectives.
- Met with the School Nutrition Services (SNS) central office team and school site supervisors.
- Spent a day at each of the ten schools to conduct the following activities:
 - Interviewed the dean of students, principal or assistant principal, PTA representative (if available), and SNS site supervisor;
 - Observed meal service at each school;
 - Assessed each school's mechanical, electrical, and plumbing infrastructure assigned to the SNS program;
 - Assessed all pieces of equipment in the kitchen, serving area, and dining room;
 - Evaluated dining aesthetics, including lighting, layout, color, and general facility condition; and
 - Observed operating practices, including, but not limited to, food preparation, serving line flow, cashiering, food handling and storage, food safety, sanitation, and equipment use.
- Reviewed documents and data provided by ACPS, including:
 - Existing floor plans;
 - Equipment lists and status reports;
 - Current and projected enrollment data;
 - Current school lunch participation data;
 - 2015 free and reduced enrollment data; and
 - Menus.
- Ascertained ACPS's future aspirations for increasing participation and meeting all federal and state regulations.
- Analyzed the data in the context of the school district's aspirations.

PRIMARY FINDINGS

The ten schools were constructed over a 43-year period from 1923 to 1966. The newest school will be fifty years old in 2016. While most schools have had classroom and other renovations, few have had full kitchen and serving area updates. Below is a chart illustrating the age of each school.



FIGURE 1: Building age of schools assessed.

ENROLLMENT AND SCHOOL NUTRITION SERVICES PARTICIPATION.

The project team reviewed the current and projected enrollment for each of the ten schools along with the percentage of students who participate in breakfast and lunch on average each day. The short-term goal is to increase overall participation by five percent (5%) with the long-term goal to raise all students' participation across all schools. Understanding participation is critical to ensuring that the kitchens, serving areas, and dining rooms can accommodate these projected increases. Attaining this participation goal is dependent on each school's ability to serve healthy, appealing food quickly and efficiently in an attractive, comfortable setting. The ability to attract all students to participate in the program is directly dependent on improving the operating, functional, and aesthetic facets of the program.

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FIGURE 2: Total capture rate of participants at assessed schools.

Figure 2 depicts number of eligible free and reduced as well as full-pay students who actually participate in lunch and the gap which represents the program's potential growth after the improvements. There is no single factor that will increase participation and close this gap. It must be a combination of fast serving lines; equipment that support wholesome, freshly-prepared food; good merchandising (lighting packaging, etc.); and an appealing, comfortable environment to attract students. George Washington has the largest gap, and would generate the largest return on any investment. Mount Vernon and Francis Hammond have the next largest gaps, but Francis Hammond can achieve significant return with school nutrition funds, while Mount Vernon will require capital improvement funds.

HOLISTIC SOLUTIONS

What does it take to have a successful SNS program that attains higher participation?

 Appealing, nutritious food prepared and served efficiently and attractively in a pleasant, comfortable environment.

What components must be in place to deliver the above?

- Mechanical, electrical, and plumbing systems to support the facilities and equipment.
- Adequately sized, functioning equipment that is appropriate to store, cook, and hold the menu that is served.
- Well-designed, adequately-sized serving lines to attractively and safely merchandise and resupply the food to facilitate efficient flow through the serving and cashiering processes.
- An attractive, comfortable **dining** space where students can enjoy their meals.
- Continuously trained staff with appropriate operational systems, procedures, and tools who can properly store, process, cook, and serve the food.

The project team first evaluated the ten schools against the characteristics of successful programs. The next step was to identify holistic solutions for each school. Existing conditions are presented on the following pages.

EXISTING CONDITION ASSESSMENTS

MECHANICAL, ELECTRICAL, AND PLUMBING (MEP) ASSESSMENT

Potomac Energy Group (PEG) assessed the mechanical, electrical, and plumbing systems related to foodservice operations at each school. Simply because a school has the infrastructure to support good lighting, it does not mean that the existing lighting is adequate; it only means that modifications can be made using the existing power. The same is true for almost all of the MEP assessments. As an example, the heating, ventilation, and air conditioning (HVAC) may be satisfactory in the cafeteria where renovations or upgrades were completed in recent years, but the kitchen HVAC is problematic as it was excluded from the renovations in most cases. Some kitchens receive their ventilation and air relief from the adjacent cafeteria, which is not ideal. Issues such as kitchen HVAC and hood exhaust systems that have not been addressed as renovations in the kitchen area may trigger significant code compliance issues. In some cases, the renovations throughout the rest of the building have actually negatively impacted the kitchens and serveries. Several schools have upgraded building automation controls for the recent overall school HVAC modernization which has created control or operation issues for the existing kitchen HVAC and hood exhaust systems that were not replaced in the scope of work. Plumbing in all but one of the schools is a major issue that is costly to fix but must be improved in order to support the program.

SUMMARY OF MEP ASSESSMENT										
	Johh Adams	Charles Barrett	Lyles Crouch	Francis Hammond	Cora Kelly	Matthew Maury	Mt. Vernon	James Polk	William Ramsay	George Washington
Cafeteria HVAC										
Cafeteria Lighting										
Cafeteria Power Distribution										
Cafeteria Life Safety										
Kitchen HVAC										
Kitchen Plumbing										
Kitchen Lighting										
Kitchen Power										
Kitchen Life Safety Alert Systems										
OVERALL MEP EVALUATION										

Figure 3 below represents the severity of the MEP issues at the ten schools. Lyles Crouch, Matthew Maury, and William Ramsay all have an overall MEP evaluation of "serious concern."

Satisfactory Moderate Concern Serious Concern

Source: Potomac Energy Group

FIGURE 3: Summary of MEP conditions.

EQUIPMENT AND FACILITY ASSESSMENT

The equipment lists contained in this report are current and should be used when referencing the equipment in each school. Each school's unique equipment challenges are identified in the individual school reports. A summarization of the major issues is provided below.

- Nonfunctioning equipment is taking up space in the kitchens and under the hoods.
- Employees are not consistently trained to use or maintain the foodservice equipment properly.
- Some kitchens do not have the most appropriate equipment to prepare the SNS menus properly.
- Some temperature gauges are not calibrated or not working on cold storage or cooking equipment.
- Current equipment placement often does not support efficient workflow.
- Some equipment is not installed properly, due in part to inadequate MEP support.

Figure 4 below represents the severity of equipment and facility issues at the ten schools. Charles Barrett, Matthew Maury, and James Polk all have an overall equipment and facility evaluation of "serious concern."

SUMMARY OF FACILITIES & EQUIPMENT CONDITIONS ASSESSMENT										
	Johh Adams	Charles Barrett	Lyles Crouch	Francis Hammond	Cora Kelly	Matthew Maury	Mt. Vernon	James Polk	William Ramsay	George Washington
Dining Capacity										
Dining Room Aesthetics										
Speed of Service										
Serving Aesthetics										
Code Compliance										
Prep Equipment Variety										
Cooking Equipment Variety										
Holding Equipment										
Storage Capacity										
Equipment Capacity										
Equipment Condition										
Layout/Flow										
Facility Supports Fresh Menu										
OVERALL FACILITIES/EQUIP.										

Source: Birchfield Jacobs Foodsystems

FIGURE 4: Summary of Equipment & Facility Conditions.

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SERVING LINE ASSESSMENT

Most of the schools have antiquated serving lines and a lack of space to adjust them. The buildings were constructed at a time when the menu was strictly set and the plates were dished up and handed to the students. Students now have a variety of choices. The entrée may be General Tso's chicken with rice or macaroni and cheese. There may also be multiple fruit and vegetable choices. This type of "menu choice" program requires different serving line configurations and capacities.

Lighting over the food is essential to make it attractive to students. Some of the schools have sneeze guards with lighting, but some do not. In some cases the lights are not functioning and in others staff does not turn on the lights. Servery height is a challenge, especially at John Adams, which was a middle school and now serves PK through 5th graders. Many students are not tall enough to see or reach the food.

Students have 30 minutes get their food, get settled in their seats, eat, clean up, and line up to return to class. If they spend 20 minutes in line for their food, they have only 10 minutes to sit, eat, and line up. Not only does the food have to look appealing and taste good, it has to be served quickly. Students with more resources opt to bring food from home so they can have more time to eat, relax, and socialize.

Detailed serving line assessments for each school are presented in the attached reports, but common issues at a majority of the schools are listed below.

- Serving lines are too short to serve the current menu variety.
- Holding equipment is not convenient or sufficient to resupply the line.
- Counter height is a challenge for younger students.
- Lighting within the sneeze guards is inconsistent, not functioning, or not used.
- There are inconsistent procedures regarding what utensils and condiments are available and in what form.
- Placement of beverage coolers results in serving line flow disruptions.
- Hot and cold thermal support is not adequate.

DINING ROOM ASSESSMENT

The seating areas at most of the schools are unattractive, poorly lit, and often cluttered with materials for other programs. Students do not find the dining areas attractive or inviting. A clean, relaxing, comfortable dining space makes a huge difference in the perception of the food, even for younger students.

Specific dining room issues include:

- Lighting is poor, especially when the dining area has no or limited natural light.
- Table placement negatively impacts ingress, egress, and line flow.

- Seats are broken or missing from tables.
- Walls are drab and sometimes cluttered with a haphazard array of paper signs and graphics.
- There are places where equipment or lights were removed but the conduit is still in place and there are boarded up old dish returns that have not been covered. These factors help create an unappealing dining atmosphere.
- After-school program materials are stacked haphazardly around the room, even when storage is available.
- Garbage cans are overflowing and located in areas that create unappetizing conditions.
- Not all dining rooms have a water fountain, thus no access to drinking water.
- The number of seats exceeds the posted limit in six of the ten dining rooms. The seats are not
 always age appropriate for the size of students currently enrolled at the school.

OPERATIONS ASSESSMENT

Spatial and equipment improvements are the underpinnings of an improved program. Equally important is continuous training and aggressive oversight in each school. There must be proper use and care of the equipment, consistent food preparation, safe food handling, and efficient service if the program is to reach its participation goal. The goal is unlikely to be achieved unless there is supervisory oversight at each school from the district's SNS office. A supervisor should be in each school at least once or twice a week to observe the workers, identify and implement corrective measures, reinforce preparation standards, and encourage the site staff to prepare consistently high-quality food and deliver excellent service. Based on the project team's observations, the on-site employees appear capable and eager to learn how to improve their respective operations. What is missing is the on-going training and oversight to make improvements a reality. A partial list of the training issues to address is listed below.

- Adequate inventory control systems.
- Improved forecasting systems.
- Merchandising techniques.
- Consistent follow-thru with recipe instructions.
- Improved equipment use and maintenance.
- Consistent hot and cold holding procedures.

RECOMMENDED ACTIONS

The project team developed at least two renovation schemes for each school. The schemes range from aesthetic improvements to the dining area all the way through expansions and kitchen renovations. In some cases, a third scheme is described to show the real potential for the space.

- Scheme I In all cases, this scheme addresses aesthetic upgrades to the dining room. In some cases, serveries are affected by the dining room upgrades by virtue of their locations. The majority of the Scheme I changes qualify for school lunch fund expenditures.
- Scheme II This scheme addresses the issues that will improve food handling, preparation, and storage, but also will require code compliance work. While equipment purchases qualify as authorized school lunch fund expenditures, many of the Scheme II code compliance work will require CIP (Capital Improvement Plan) dollars. Often the new equipment installation and old equipment removal trigger the need for CIP-funded work on the infrastructure.
- Scheme III This scheme involves changes outside the current space, such as adding refrigeration units to the outside of the building or, in the case of James Polk, renovation and facility upgrades to address current capacity needs. Most all of the changes under a Scheme III will have to be funded from CIP budgets.



In some cases, the serving line is open to the kitchen without full separating walls. In these school renovations to serving lines located within a kitchen area will trigger code compliance work. This indicates a need for CIP dollars to supplement what can legally be funded with lunch fund dollars.

The following pages outline corresponding budget allocation and recommended schemes.

BUDGET ALLOCATIONS

The project team developed preliminary budget estimates for each improvement scheme. These budgets are initial projections only, based on information provided by ACPS and the project team's high-level review of each school. Actual project costs may vary based on conditions, particularly the scope, scale, and schedule of each project. Detailed costs can be developed once individual school program considerations are finalized.

The tables below show the low and high ranges for each scheme by school. Scheme I in all instances is a cosmetic upgrade to the dining areas and does not resolve any of the preparation and service challenges described in the reports for each school. If the servery is in the kitchen, any modification to that area will trigger full code compliance throughout. When the servery is not in the kitchen, scheme I is able to provide programmatic solutions.

All budget allowances include a 10 percent design contingency (for programmatic changes that occur over the course of the design process) and 15 percent soft cost (architectural fees, permitting, etc.) allowance. Soft costs, such as architectural, project management, kitchen design, engineering, and other services can be controlled if projects are bundled. The district could save on soft costs if it did multiple projects at once, utilizing the same designer, engineer, etc.

The project team recommends that ACPS do scheme I for Cora Kelly, scheme III for James Polk and scheme II for the remaining schools. School Nutrition Funds have stringent restrictions on how they can be spent. It will require Capital Improvement Plans to complete the non-eligible work. ACPS will have to put CIP funds into its future budgets to allow for this work.

School		Scheme I	Scheme II	Scheme III	
Goorge Washington	Low	\$729,070	\$1,009,070		Recommended
George washington	High	\$1,058,218	\$1,448,218		Scheme
Mt) (arpan	Low	\$112,200	\$651,263	\$839,481	
Mt vernon	High	\$215,050	\$880,675	\$1,117,863	
Francia Llammand	Low	\$820,945	\$1,398,039	\$3,547,569	
Francis Hammond	High	\$1,170,718	\$1,807,186	\$4,230,406	
	Low	\$1,077,641	\$1,236,235		
John Adams	High	\$1,445,440	\$1,629,815		
Charles Derrett	Low	\$350,479	\$477,085		
Charles Barrett	High	\$503,578	\$675,328		
	Low	\$345,454	\$477,610		
Matthew Maury	High	\$501,128	\$677,378		
	Low	\$73,125	\$457,188	\$1,249,844	
	High	\$140,313	\$554,063	\$1,476,406	
	Low	\$426,185	\$659,685		
Lyles Crouch	High	\$610,678	\$912,365		
William Ramsay	Low	\$357,320	\$1,620,195	\$1,820,508	
	High	\$515,520	\$1,925,020	\$2,184,395	
Cora Kelly	Low	\$240,238	\$560,738		
	High	\$377,575	\$796,575		
Recommended Schemes	Low	\$240,238	\$7,529,181	\$1,249,844	\$9,019,2
Total	High	\$377,575	\$9,955,984	\$1,476,406	\$11,809,9

Total Project Cost

*All estimates are in 2015 dollars and will need adjustment as time passes.

**Estimates do not include cost of asbestos abatement or abatement of abandoned boiler room at Matthew Maury.

 $^{\ast\ast\ast}\mbox{Estimates}$ include a 10% design contingency and 15% soft cost allowance.

****Final design cost is dependent on delivery method and number of schools packaged together.

*****Estimates do not include cost of dining room furniture.

******Estimates are based on the conditions existing during the project team's on-site visits and operating data provided by ACPS.

*******Estimates are based on current targeted growth and will need adjustment over time and as redistricting proceeds.

FIGURE 5: Budget summary of costs associated with all three schemes.

RECOMMENDED SEQUENCING

As noted earlier in this document, the solutions are impacted by a variety of interrelated factors. Primarily they include:

- The relationship of Federal Regulations on School Nutrition Funds and the School District's Capital Improvement Plan. While the SNF can be used to buy new equipment, the installation of that equipment may trigger code compliance issues, asbestos abatement, or other remediation activities that are not covered by the SNF.
- MEP issue such as plumbing, while often very expensive, are necessary to support code compliance and enable the program to serve the menu set by the new School Nutrition Act requirements.
- In some cases, schools have grown over the years without increasing cafeteria capacities, so there is no place to "expand" inside buildings' existing walls. Expanding outside of a building triggers a need for CIP dollars.
- The question of potential student impact depends upon the general facilities needs of a given building and the school's relative enrollment. Mathew Maury, for example, has significant facilities issues yet does not impact as many students.

School	Total Enrollment	Current Average Daily Participation	Gap (growth potential)	Mid-Range Cost of Recommended Option
George Washington	1,286	577	709	\$1,228,644
Mt. Vernon*	854	510	344	\$765,969
Francis Hammond*	1,414	1,104	310	\$1,602,613
John Adams*	1,016	714	302	\$1,715,213
Charles Barrett*	479	216	263	\$576,206
Matthew Maury*	443	210	233	\$577,494
James Polk*	750	530	220	\$750,000
Lyles Crouch*	409	195	214	\$812,713
William Ramsay*	912	784	128	\$1,772,608
Cora Kelly*	358	323	35	\$308,000

<u>Notes</u>

1) Schools with asterisk may require CIP funding to correct issues not allowable under Federal Regulations for School Nutrition Funds. Because Hammond has good MEP structure it could be elevated to the second school in line based on the availability of school lunch funds whereas Mt. Vernon will definitely require CIP funding.

2) All of these should be reviewed after the redistricting study is completed to determine whether enrollment changes might change the potential gap for each school.

3) For economies of scale it is beneficial to bundle these projects. This is a preliminary ranking that may shift as more information is available.

FIGURE 6: Priority recommendations.

RECOMMENDED SCHEMES

John Adams: Scheme II



- Improve lighting in the dining and kitchen areas.
- Organize afterschool program materials and desks. Provide adequate storage.
- Organize boards and spaces for artwork, notices, and banners.
- Add new finishes that introduce more modern color schemes, incorporate visual textures, and define circulation areas better.
- Open up the serving area to dining so it becomes a defined space with a higher level of finish than other spaces.
- Install serving counters that are decorative, but remain utilitarian (e.g., systems by Colorpoint/Low Temp).
- Install finishes that are highly retail, to include colorful wall tiles, pendant and spot lighting, and details such as electronic menu boards and food education systems.
- Brand the serving area with a café concept.
- Install double-sided cashiering station(s) and self-serve bars that are remote from the serving line.
- Expand serving capabilities by adding a third service line.
- The excess kitchen space should be used to expand storage capacity to meet volume of meals served and to provide custodial storage to get that clutter out of the public areas.

Charles Barrett: Scheme II



- Improve lighting in the dining area.
- Add new finishes that introduce more modern color schemes, incorporate visual textures, and define circulation areas better.
- Renovate the serving area with a higher level of finish than other spaces.
- Install serving counters that are decorative, but remain utilitarian (e.g., systems by Colorpoint/Low Temp).
- Install finishes that are highly retail, to include colorful wall tiles, pendant and spot lighting, and details such as electronic menu boards and food education systems.
- Brand the serving area with café concept.
- Install a double-sided cashier station and self-service bars, to improve line flow, especially for the youngest students.
- Renovate the kitchen space, to include a prep sink, exhaust hood, and appropriate cooking equipment.
- Install equipment and holding units that support the menu and the level of service at this school.
- Renovate the kitchen space fully, which assumes all new electrical, gas, and plumbing systems, and commercial grade kitchen finishes.





- Improve the dining room's lighting, even though it has some natural light.
- Add new finishes that introduce more modern color schemes, incorporate visual textures, and define circulation areas better.
- Renovate the serving area with a higher level of finish than other spaces.
- Install serving counters that are decorative, but remain utilitarian (e.g., systems by Colorpoint/Low Temp).
- Install finishes that are highly retail, to include colorful wall tiles, pendant and spot lighting, and details such as electronic menu boards and food education systems.
- Brand the serving area with a café concept.
- Install double sided cashiering and self-service bars to improve line flow.
- Renovate the kitchen space, to include a prep sink, exhaust hood, and appropriate cooking equipment.
- Install equipment, supported by carts and cabinets, to allow for batch cooking of program favorite menu items such as pizza, chicken sandwiches, nuggets, etc.
- Renovate the kitchen space fully, which assumes all new electrical, gas, and plumbing systems, and commercial grade kitchen finishes.

Francis Hammond: Scheme II



- Improve lighting in the dining area.
- Organize boards and spaces for artwork, notices, and banners.
- Add new finishes that introduce more modern color schemes, incorporate visual textures, and define circulation areas better.
- Define the serving area with a higher level of finish than other spaces.
- Install serving counters that are decorative, but remain utilitarian (e.g., systems by Colorpoint/Low Temp).
- Install finishes that are highly retail, to include colorful wall tiles, pendant and spot lighting, and details such as electronic menu boards and food education systems.
- Brand the serving area with a Café concept.
- Install double-sided cashiering stations to improve the serving lines.
- Construct an addition that connects the dining rooms and allows for access to any of the service lines.
- Reconfigure seating to support the growing student population.
- Program serving areas to allow for multiple menu items.
- Renovate the kitchen fully, but maintain the basic organization of the spaces and retain the walk-in refrigerators and storage rooms. This renovation assumes all new electrical, gas, and plumbing systems, and commercial grade kitchen finishes. This will improve the lunch service and support the breakfast in the classroom program.

Cora Kelly: Scheme I



- Even though the dining room has natural light, better lighting would help during dreary weather days.
- Add newer finishes that introduce modern color schemes, incorporate visual textures, and better define circulation areas.
- The serving area will be renovated with a higher level of finish than other spaces.
- Install serving counters that are decorative, but remain utilitarian (e.g., systems by Colorpoint/Low Temp).
- Finishes will be highly retail, to include colorful wall tiles, pendant and spot lighting, and details such as electronic menu boards and food education systems.
- The serving area could be branded, with each school having its own café.
- Install double-sided cashier stations and self-service bars to improve the serving line.
- A walk-in refrigerator will be added to the kitchen.

Matthew Maury: Scheme II



- Improve the dining area's lighting.
- Add new finishes that introduce more modern color schemes, incorporate visual textures, and define circulation areas better.
- Install serving counters that are decorative, but remain utilitarian (e.g., systems by Colorpoint/Low Temp).
- Install finishes that are highly retail, to include colorful wall tiles, pendant and spot lighting, and details such as electronic menu boards and food education systems.
- Brand the serving area with a café concept.
- Install double sided cashiering and self-serve bars to improve the serving lines.
- Renovate the kitchen space, to include an exhaust hood and appropriate cooking equipment.
- Define the serving area with a higher level of finish than other spaces.
- Renovate the kitchen space fully, which assumes all new electrical, gas, and plumbing systems, and commercial grade kitchen finishes.

James Polk: Scheme III



- Expand the dining area.
- Improve the dining room's lighting even though it has some natural light.
- Add new finishes that introduce more modern color schemes, incorporate visual textures, and define circulation areas better.
- The serving area becomes a defined space with a higher level of finish than other spaces.
- Serving counters will be decorative, but remain utilitarian (e.g., systems by Colorpoint/Low Temp).
- Finishes will be highly retail, to include colorful wall tiles, pendant and spot lighting, and details such as electronic menu boards and food education systems.
- The serving area could be branded, with each school having its own café.
- Double-sided cashier stations will be located outside the serving line and self-serve bars should be installed to improve the serving line flow.
- The kitchen space will be fully renovated, installing new exterior walk-in refrigerator and freezer with the addition of an exterior office. This scheme assumes all new electrical, gas, and plumbing systems, and commercial grade kitchen finishes.





- Improve lighting in the dining room.
- Organize after-school program materials and desks. Provide adequate storage.
- Have cohesive artwork and organized school notices to create a more coherent and unified space.
- Incorporate new finishes in the dining room that introduce fresh color schemes, incorporate visual textures, and define circulation areas better.
- Define the serving area with a higher level of finish than other spaces.
- Install serving counters that are decorative, but remain utilitarian (e.g., systems by Colorpoint/Low Temp).
- Integrate high-quality retail finishes, to include colorful wall tiles, pendant and spot lighting, and details such as electronic menu boards and food education systems.
- Brand the serving area with a café concept.
- Install double-sided cashiering stations and self-serve bars to improve the serving line flow.
- Renovate the kitchen fully, but maintain the basic organization of the spaces, including refrigeration.
- This scheme assumes all new electrical, gas, and plumbing systems, and commercial grade kitchen finishes.

Mount Vernon: Scheme II



- Improve lighting in the dining room.
- Organize storage for cleaning equipment and Campagna program.
- Implement a cohesive décor:
 - Coordinate the color pallet.
 - Organize wall hangings (e.g., artwork, posters, notices, and banners).
 - Modernize finishes to introduce kid-friendly color schemes, incorporate visual textures. (e.g., drop ceiling), and define circulation areas.
- Define the serving area with higher-level finishes.
- Install serving counters that are decorative and colorful, but utilitarian.
- Install finishes that are highly retail, to include colorful wall tiles, pendant and spot lighting, and details such as electronic menu boards and food education systems.
- Brand the serving area with a café concept.
- Install double-sided cashiering stations and self-serve bars to improve the serving line flow. Renovate the kitchen space fully, but maintain its basic organization and retain walk-in refrigerators and storage rooms.
- Install all new electrical, gas, and plumbing systems, and commercial grade kitchen finishes.
- This scheme partially relocates cashiering into the dining room.

George Washington: Scheme II



- Improve the dining room's lighting even though it has some natural light.
- Add new finishes that introduce more modern color schemes, incorporate visual textures, and define circulation areas better.
- The serving area becomes a defined space with a higher level of finish than other spaces.
- Renovation to the serving area would support a scramble model.
- Serving counters will be decorative, but remain utilitarian systems by Colorpoint/Low Temp.
- Finishes will be highly retail, to include colorful wall tiles, pendant and spot lighting, and details such as electronic menu boards and food education systems.
- The serving area could be branded, with each serving line having its own café.
- Cashiers are remote from the serving lines, allowing for reduced labor during off-peak periods.
- Expansion of the dining room to address additional demand and the loss of space taken by the serving areas.
- The kitchen space is renovated partially, but the basic organization of the spaces remain. Storage and employee areas are reworked to allow for the expansion of the dining room.

RECOMMENDED OPERATING ACTIONS:

- Divide the schools into two "areas" for purposes of training and ongoing oversight. In addition to the current SNS specialist Supervisor, a second could be hired by contract for a period of two years to accomplish the necessary training and provide aggressive oversight. Ultimately, when the programs at each school have been brought up to the desired standards, the additional specialist's contract would not be renewed. This on-site supervision is key to maximizing the potential for the program, regardless of what renovation scheme is selected for each school.
- Develop and implement a new production management system that allows for more accurate food projections and reduces waste.
- Develop and implement merchandising standards for all items served.
- Implement regular preventive maintenance systems for kitchen equipment.
- Develop a priority plan to assure that foodservice equipment is repaired as quickly as possible.
- Develop and implement a plan to provide nutrition education (including food labelling) as part of the daily meal experience in the cafeterias.