

FPAC Agenda
September 5, 2017
Room 5050, Gatehouse Administration Center
7:00 – 9:00 pm

Meeting Opening/Announcements

2017-18 School Board Liaison to FPAC: Tom Wilson (Sully)

FCPS Staff Liaisons: Jeff Platenberg, Kevin Sneed

Community Time

Opportunity for the public to address the Council.

Staff Announcements

Approval of Meeting Minutes (May 16, 2017)

Old Business

Annual Report to School Board on July 10, 2017

New Business

Election of FPAC Officers for 2017-2018

FPAC Work Plan for 2017-2018

2017-18 FPAC Annual Charge from School Board

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

- Developing the long-range vision for FCPS school facilities, to be included in the Facilities Comprehensive Plan;
- Developing a CIP that reflects the capacity and major maintenance requirements of FCPS and demonstrates the impact of the current bond funding limits;
- Further reviewing the effectiveness of the facilities-related energy savings and green initiatives; and,
- Analyzing the outcome of prior recommendations, re-presenting any that FPAC believes should be adopted

Committees to work on Annual Charge

Asset Management and Maintenance Presentation (Ian Kelly)

Member Time

Adjournment

Note: The officers will hold a coordination meeting, prior to the full session, from 6:30-7:00 pm in room 3415. Open to all.

MINUTES

Facilities Planning Advisory Council (FPAC)

Regular Meeting
2017-18 School Year

September 5, 2017

The meeting convened at 7:01 pm in Room 5050 of the Gatehouse Administration Center.
The following FPAC members attended:

Charles Hookey	<i>Braddock/Secretary</i>	Kate Howarth	<i>Providence</i>
Jay Reddy	<i>Dranesville</i>	Ian Kelly	<i>Springfield</i>
Howard Perlstein	<i>Hunter Mill</i>	Melina Duggal	<i>At Large</i>
Chris Nuneviller	<i>Lee</i>	Karen Hogan	<i>At Large/Chair</i>
Dan Aminoff	<i>Mason/Vice Chair</i>	Dave Phillips	<i>At Large</i>
Scott Higgins	<i>Mt. Vernon</i>	Allen Griffith	<i>Fairfax City</i>

FCPS Staff:

Jeff Platenberg, *Assistant Superintendent, Department of Facilities and Transportation Services*
Kevin Sneed, *Special Projects Administrator for Facilities and Transportation Services*

Meeting Opening

Karen Hogan opened the meeting. She reported that Aimee Holleb has been appointed interim principal at Key Middle School and consequently left her position with the facilities department. Hogan also announced that School Board member Tom Wilson (Sully) has been selected to serve as School Board liaison to FPAC for the year.

Community Time

No community time was requested.

Minutes

Minutes from the May 16, 2017 FPAC meeting were approved.

Staff Announcements

Sneed announced he is interviewing for Holleb's Director of Planning position and expects to fill it within the month.

He distributed copies of the FCPS-prepared brochure explaining the proposed bond referendum to be voted upon in the upcoming general election on Nov. 7. Platenberg and Sneed have met, and will continue to meet with community organizations explaining the need for approval of the bond referendum. Sneed commented on several of the projects outlined in the brochure noting that he expects impossible-to-predict increases in the costs of labor and oil to adversely impact some/all of the estimates (depending on how far "out" the projects are). He also noted that increased costs due to building code changes for storm water management, as a percent of project cost, have risen from about 4% to 14%, and he would not be surprised to see it approach 20% in the not-too-distant future.

He noted that the number of trailers in use continues to decrease, though school-specific requests not to take away trailers continues to be a challenge.

Sneed commented on the proffers situation, noting that over the last 15 years only some \$15M has been paid by developers toward school construction. This is less than one percent of what's been spent by FCPS on construction in that time.

Old Business

Hogan summarized FPAC's July Annual Report presentation to the School Board and its favorable reception.

Hogan reported on the meeting she and Aminoff had with new superintendent Scott Brabrand. The meeting went well and the take-away was he saw FPAC's value in providing a long-range vision for facilities and the associated changes that County residents will face. By making the vision known, residents will have the opportunity to plan accordingly. He noted that programs (curriculum, centers, IS decisions) do impact facilities and that there must be (better) coordination between those using the facilities and those providing the facilities.

Hogan suggested FPAC concentrate now on the previously proposed long-range facilities plan focusing on the three major development areas in the County – Dulles Corridor, Tysons, and EMBARK (Rt. 1/Richmond Hwy.) – and work with facilities staff to articulate that plan.

New Business

As required by FPAC By-Laws, Council officers for the year were elected. Hogan, Aminoff, and Hookey were re-elected as Chair, Vice Chair, and Secretary respectively.

Hogan asked for a volunteer to accompany Kelly on his upcoming meeting with Maintenance Director Mike Coughlan. Howarth or Nuneviller will go, depending on availability and meeting time.

The 2017-18 FPAC Charge was divided into committee assignments and FPAC members volunteered accordingly:

- Developing the long-range vision for FCPS school facilities, to be included in the Facilities Comprehensive Plan;
Duggal, Griffith, Hookey, Howarth, Perlstein, Phillips
- Developing a CIP that reflects the capacity and major maintenance requirements of FCPS and demonstrates the impact of the current bond funding limits;
Higgins, Nuneviller, Perlstein, Reddy
- Further reviewing the effectiveness of the facilities-related energy savings and green initiatives; and,
Aminoff, Kelly, Reddy
- Analyzing the outcome of prior recommendations, re-presenting any that FPAC believes should be adopted.
Aminoff, Hogan, Hookey

Plus

Work on the Asset Management Plan that has come to be an FPAC focus:
Howarth, Kelly, Phillips

Hogan asked that Kelly send the list of questions he had developed regarding a review of the Cenergistic contract to all FPAC members.

Kelly presented his brief of an Asset Management Plan (attached separately). The primary goal of such is to provide the School Board a compelling argument of the need for such a plan, seek the funding of such, and direct Facilities accordingly. Although Facilities continues to currently "manage" (remarkably well) its various assets, the lack of an endorsed, funded planning document reflects poorly on an organization the size of FCPS. Considerable discussion among FPAC members followed.

Member Time

Reddy reported on a meeting he had with SB Member Strauss who noted concern for a plan to accommodate the Tysons development among Marshall, McLean, and Langley high schools.

Kelly reported on a meeting he had with SB Member Schultz who reiterated the economics of boundary changes as a solution to overcrowding and emphasized the need to use all FCPS facilities and "holdings" to the best advantage.

Adjournment

The meeting was adjourned at 9:30 pm.

FPAC Agenda
October 3, 2017
Room 5050, Gatehouse Administration Center
7:00 – 9:00 pm

Meeting Opening/Announcements

Community Time

Opportunity for the public to address the Council.

Staff Announcements

Staff Presentation/Discussion

Mike Coughlan, FCPS Facilities Management Services

Approval of Meeting Minutes

Old Business

FPAC Work Plan for 2017-2018 and committee assignments:

2017-18 FPAC Annual Charge from School Board

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

- Developing the long-range vision for FCPS school facilities, to be included in the Facilities Comprehensive Plan;
Duggal, Griffith, Hookey, Howarth, Perlstein, Phillips
- Developing a CIP that reflects the capacity and major maintenance requirements of FCPS and demonstrates the impact of the current bond funding limits;
Higgins, Nuneviller, Perlstein, Reddy
- Further reviewing the effectiveness of the facilities-related energy savings and green initiatives; and,
Aminoff, Kelly, Reddy
- Analyzing the outcome of prior recommendations, re-presenting any that FPAC believes should be adopted
Aminoff, Hogan, Hookey

Plus

- Work on the Asset Management Plan that has come to be an FPAC focus:
Howarth, Kelly, Phillips

New Business

Member Time

Scott Higgins: Report on Association of School Business Officials Conference in Denver.

Adjournment

Note: The officers will hold a coordination meeting, prior to the full session, from 6:30-7:00 pm in room 3415. Open to all.

MINUTES

Facilities Planning Advisory Council (FPAC)

October 3, 2017

Regular Meeting
2017-18 School Year

The meeting convened at 7:03 pm in Room 5050 of the Gatehouse Administration Center.
The following FPAC members attended:

Charles Hookey	<i>Braddock/Secretary</i>	Kristen Hyatt	<i>Sully</i>
Jay Reddy	<i>Dranesville</i>	Melina Duggal	<i>At Large</i>
Howard Perlstein	<i>Hunter Mill</i>	Karen Hogan	<i>At Large/Chair</i>
Dan Aminoff	<i>Mason/Vice Chair</i>	Dave Phillips	<i>At Large</i>
Kate Howarth	<i>Providence</i>	Allen Griffith	<i>Fairfax City</i>

FCPS Staff:

Jeff Platenberg, *Assistant Superintendent, Department of Facilities and Transportation Services*
Kevin Sneed, *Special Projects Administrator for Facilities and Transportation Services*
Jessica Gillis, *Director for Facilities and Transportation Services*
Mike Coughlan, *Facilities Management Services (Asset Management/Maintenance)*

Meeting Opening

Community Time

No community time was requested.

Minutes

Minutes from the September 5, 2017 FPAC meeting were approved.

Staff Announcements

Sneed announced the staff addition of Jessica Gillis as the new department Director for planning.

The School Board Work Session on Nov. 13, 2017 will include two facility-related items: the impact of County “development areas” on FCPS; a report on efforts to minimize the number of portable classrooms (trailers) in use.

Sneed “previewed” to FPAC that he has an internal long-range goal of reducing the number of trailers to between 600-650 by 2022, which would echo 1991 levels. There are currently approximately 800 trailers in use, including 52 necessitated by the “overnight” accommodation of all-day Kindergarten throughout the system in September 2011. (Kindergarten classes are not in trailers.) There was discussion about what is a reasonable number of trailers in a system this size and the need for such “flex” space to accommodate unforeseen population changes in a given school attendance area.

Gillis spoke of the December 14, 2017 SB meeting when the new CIP (Capital Improvement Plan) will be introduced. A draft of the CIP should be available on Board Docs in time for review at the December 5, 2017 FPAC meeting.

Certified student membership (attendance) dated September 30, 2017 should be available by October 6, 2017. These numbers will be the basis for the new CIP.

Staff Presentation

Coughlan, who has a background in asset management from his career in the USAF, spoke of the asset management (maintenance) program in place/being developed over the last four years in FCPS. He referenced the outline developed by FPAC member Kelly (from his relevant experience in the USN) and reported FCPS has in place, or has plans to have in place, much of what Kelly outlined.

Getting a handle on all of FCPS' "major maintenance" assets is a huge task. The FCPS secondary schools (Hayfield, Lake Braddock, Robinson) have upwards of 1,000 individually identified "assets" which have a "useful life" (as determined by the manufacturer) and a "condition" (as determined by FCPS or other contracted review). At this point only the "useful life" is associated with assets. A "condition" review of the assets is what's needed and is being planned for as time and money allow.

Coughlan spoke of a by-district breakout of schools and their current Building Condition Grade as determined by a weighted formula which considers useful life and replacement costs. While not "proofed" enough for public sharing yet, the effort will continue and eventually present a documented situation as to the "health" of FCPS facilities. FPAC endorsed Platenberg's plan to include a summation of this effort in the new CIP and that it was important to carefully articulate this effort, and its results/indications, so as to draw attention to the need for work. The focus of the effort is to identify potential problems or breakdowns before they happen, so as to save money in the long run, especially on emergency repairs or rental equipment. As presented, it was eye-opening and brought attention to just how big an operation FCPS is and how underfunded its maintenance operation remains.

Considerable discussion ensued. Hogan suggested that in FPAC's mid-year report could focus on this issue, and include arguments for need, particularly noting the real or perceived disparity among all County facilities, noting that those devoted to children must get their "fair share" of maintenance, in relation to facilities used mostly by adults.

It was agreed that Kelly continue as FPAC's main liaison with Coughlan.

Old Business

Hyatt added her name to the 2017-18 FPAC Charge committee assignments and committee (co)chairs were identified (in bold):

- Developing the long-range vision for FCPS school facilities, to be included in the Facilities Comprehensive Plan;
*Duggal, **Griffith**, Hookey, Howarth, **Hyatt**, Perlstein, Phillips*
- Developing a CIP that reflects the capacity and major maintenance requirements of FCPS and demonstrates the impact of the current bond funding limits;
*Higgins, Nuneviller, **Perlstein**, Reddy*
- Further reviewing the effectiveness of the facilities-related energy savings and green initiatives; and,
***Aminoff**, Kelly, Reddy*
- Analyzing the outcome of prior recommendations, re-presenting any that FPAC believes should be adopted.
*Aminoff, Hogan, **Hookey***

Plus

Work on the Asset Management Plan that has come to be an FPAC focus:
*Howarth, **Kelly**, Phillips*

There was discussion regarding item one above (long-range vision) and how best to present that vision. It was suggested that FPAC and Instructional Services (and its Ed Specs) might benefit from a brainstorming session, and that this might be the focus of a mid-year retreat. A Saturday in late February 2018, possibly at TJHSST, was suggested as a possible time and place for such a retreat.

New Business

There was no new business.

Member Time

None

Adjournment

The meeting was adjourned at 8:48 pm.

FPAC Agenda
November 7, 2017
Room 5050, Gatehouse Administration Center
7:00 – 9:00 pm

Meeting Opening/Announcements

Community Time

Opportunity for the public to address the Council.

Staff Announcements

Staff Presentation/Discussion

Update on the FCPS Cenergistic contract and energy-saving efforts/results.

Approval of Meeting Minutes

Old Business

FPAC Work Plan for 2017-2018 and committee updates.

New Business

Member Time

Scott Higgins: Report on Association of School Business Officials Conference in Denver.

Adjournment

Note: The officers will NOT hold a coordination meeting prior to the full session.

MINUTES

Facilities Planning Advisory Council (FPAC)

Regular Meeting
2017-18 School Year

November 7, 2017

The meeting convened at 7:02 pm in Room 5050 of the Gatehouse Administration Center.
The following FPAC members attended:

Charles Hookey	<i>Braddock/Secretary</i>	Ian Kelly	<i>Springfield</i>
Howard Perlstein	<i>Hunter Mill</i>	Kristen Hyatt	<i>Sully</i>
Dan Aminoff	<i>Mason/Vice Chair</i>	Melina Duggal	<i>At Large</i>
Scott Higgins	<i>Mt. Vernon</i>	Karen Hogan	<i>At Large/Chair</i>
Kate Howarth	<i>Providence</i>	Allen Griffith	<i>Fairfax City</i>

FCPS Staff:

Jeff Platenberg, *Assistant Superintendent, Department of Facilities and Transportation Services*
Justin Moss, *Energy Management Coordinator*

Cenergistic Representatives:

Ray Hood, *CEO*
Randy Hoff, PE, PhD, *Vice Chairman*
Bryan Sons, *COO*
Jack Bullock, PE, *EVP Engineering*
Alisha Burris, *Program Director*
Dean Amsden, PE, *VP Engineering*

Meeting Opening

Community Time

No community time was requested.

Minutes

Minutes from the October 3, 2017 FPAC meeting were approved.

Meeting Dates 2018-19

FPAC has been asked to provide its meeting dates for the next school year. Hookey provided a draft of proposed dates via email. Members were asked to comment back to him, so a final list can be approved at the December FPAC meeting.

Staff Announcements

Sneed announced that the September 30th enrollment figures and major projects for the CIP will both be available for discussion at the December 5th FPAC meeting.

Staff Presentation

Platenberg introduced Moss from FCPS and the team from Cenergistic. Cenergistic team members narrated a slide presentation (attached) and spoke for about an hour.

Considerable discussion followed.

Higgins and Kelly will take the lead for FPAC in developing follow-up questions for FCPS staff and Cenergistics.

Old Business

There was no old business discussed.

New Business

There was no new business.

Member Time

Higgins reported on a meeting of the Association of School Business Officials International which he attended in Denver and the counterpart state meeting in Richmond, VA. His main take-away from the meetings was the realization/confirmation of FCPS uniqueness in terms of sheer size, program offerings, facilities/transportation, organizational complexity, and funding.

Adjournment

The meeting was adjourned at 9:29 pm.

Fairfax County Public Schools FPAC Energy Conservation Program Update

Ray Hood
CEO

Dr. Randy Hoff
Vice Chairman

Bryan Sons
COO

Jack Bullock PE
EVP Engineering

Alisha Burris
Program Director

Dean Amsden PE
VP Engineering

Outline



- **Introduction & Overview (Hoff)**
- **Energy Accounting (Sons)**
- **Measurement & Verification Adjustments (Amsden)**
- **Energy Conservation Measures (Bullock, Burris)**
- **Next Steps (Burris, Hoff)**

Cenergistic

Since **1986** — the energy conservation pioneers

\$4.8+ billion energy savings for **1,400+** clients in 48 states

Cut expected energy costs by an average of 26%

Nine consecutive years — ENERGY STAR Partner of the Year

65% of K-12 ENERGY STAR Top Performers are our clients

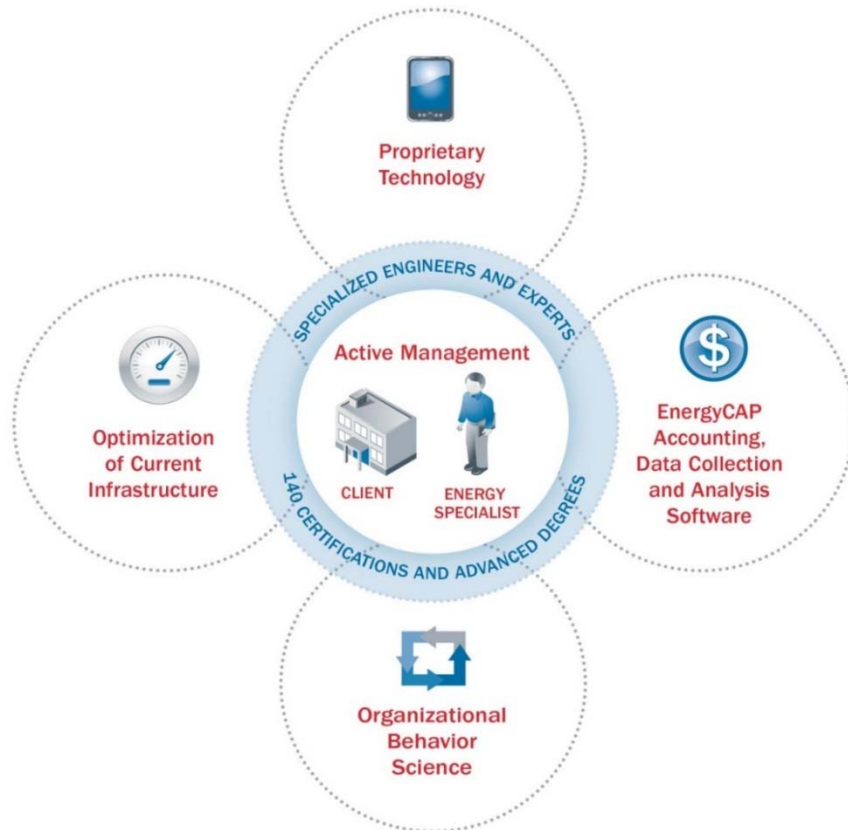
Over **23,000** buildings nationwide

#1 provider for organizational behavior-based conservation

Manage more than **\$1 billion in annual utility expenses** for clients

Cenergistic Commitment

Implementation Model



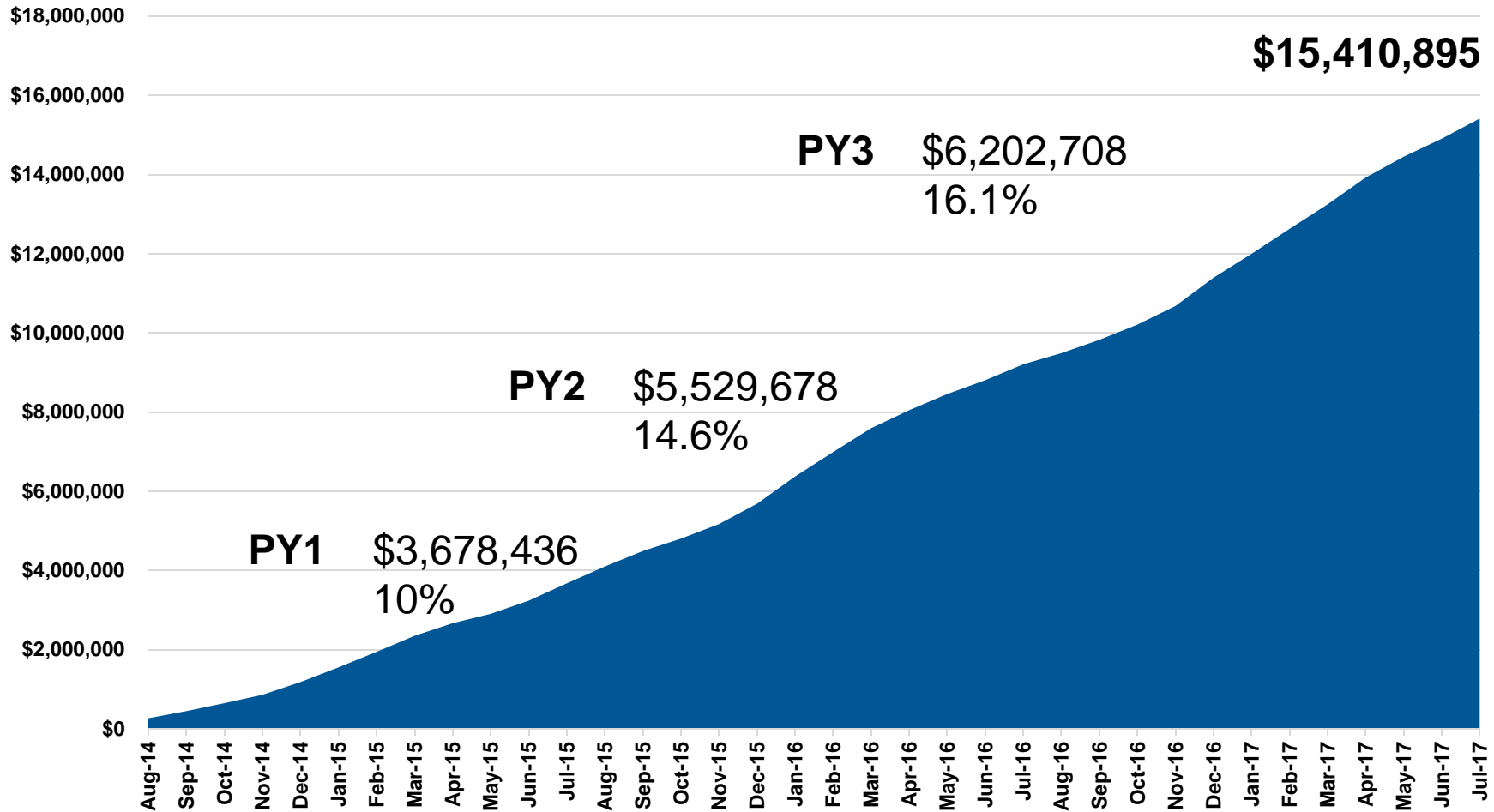
- Base Year: Feb '13 – Jan '14
- QuickStart: Feb '14 – Jul '14
- Contract Term: Aug '14 – Jul '19

Cenergistic Work Effort To Date

- 10 full-time Cenergistic employed Energy Specialists
- Documented 32,000+ building audits
- 1,200+ staff days on site for engineering, analysis, and implementation support
- Over 700 hours devoted to ENERGY STAR® verification including site assessments, engineering and application review for 2015 & 2016
- Cenergistic technology utilized including Command Center, VIT, AST and IAT

FCPS Utility Cost Avoidance Trend

FCPS Cost Avoidance Cumulative

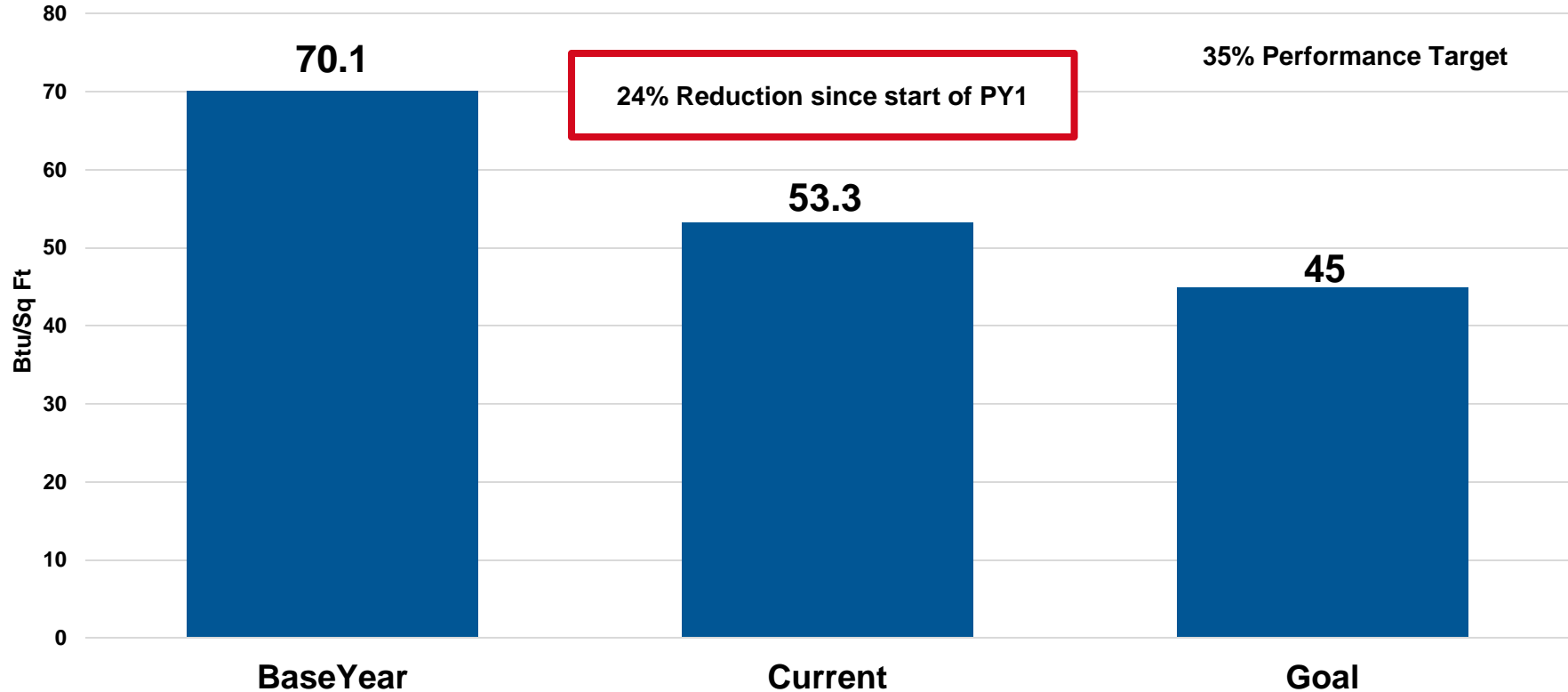


Energy Use Index— Performance

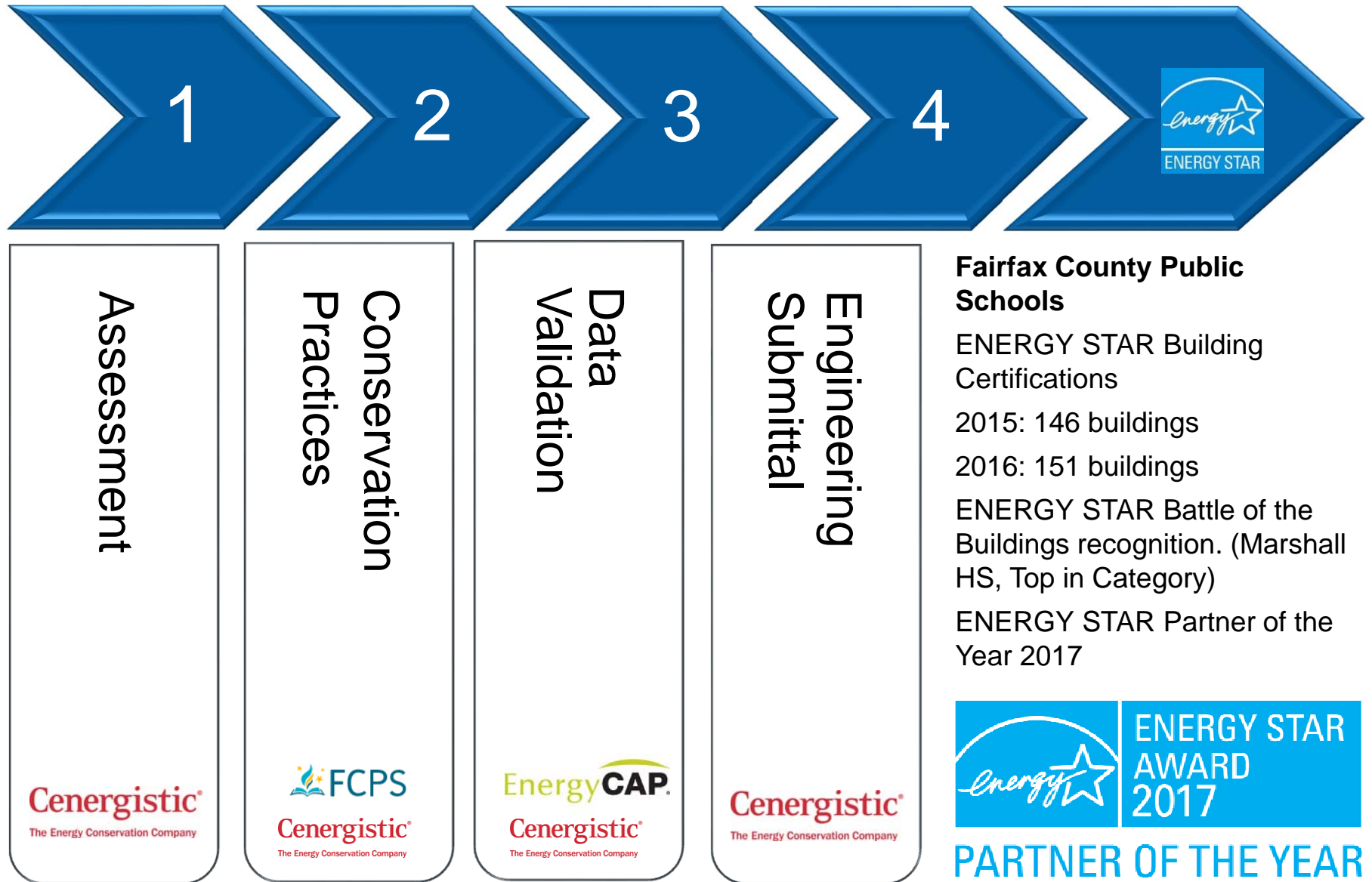
FCPS Energy Use Index (EUI) Reduction

EUI is measure of annualized energy consumption per square feet Weather impact is not adjusted

Energy Use Index (EUI)



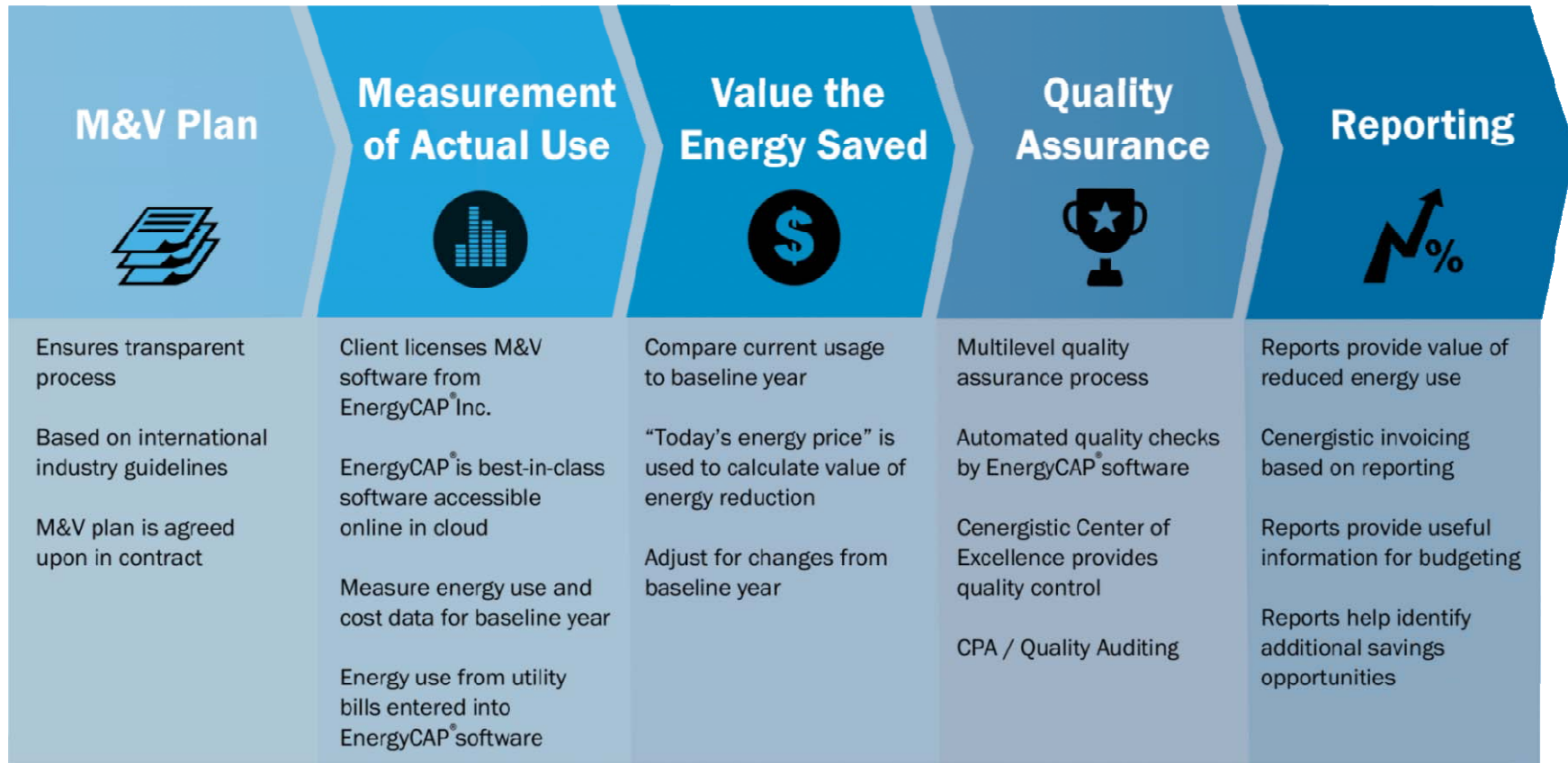
Steps to ENERGY STAR Certification



Energy Accounting

Implementation Model — Process

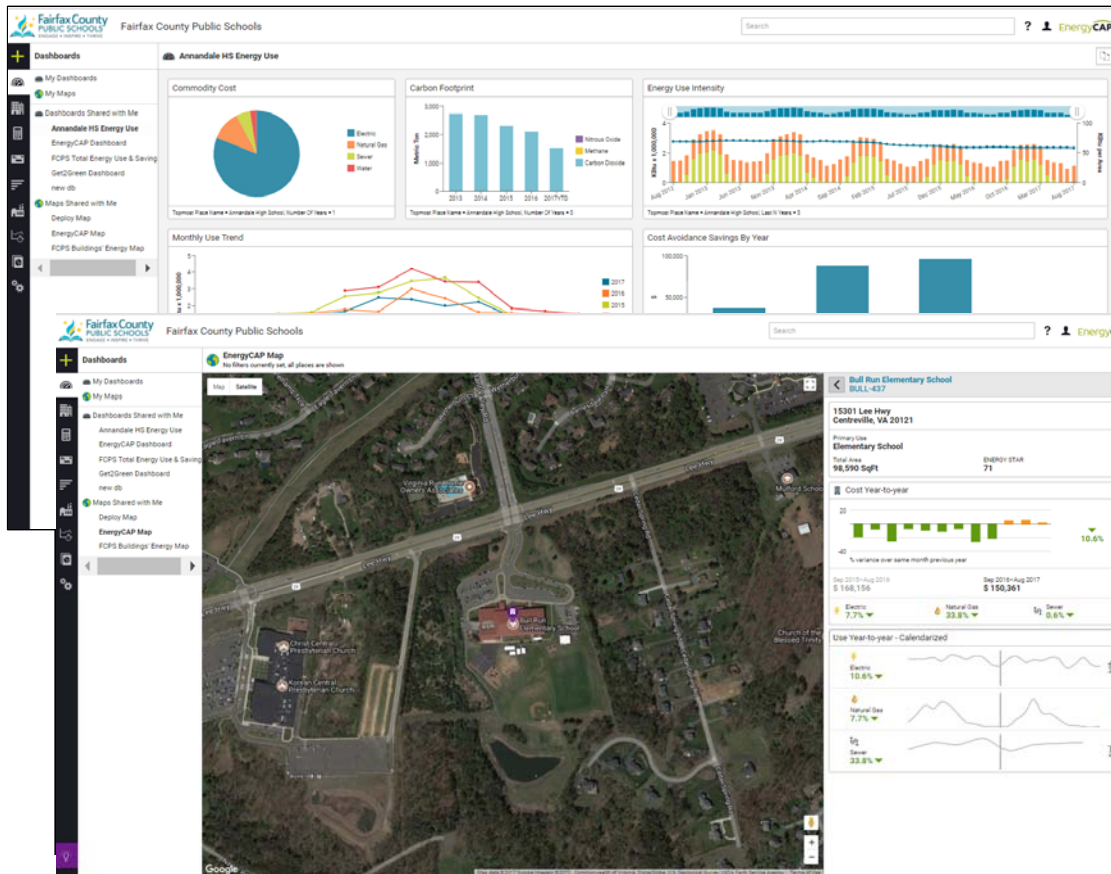
Cenergistic’s process to measure and verify savings is rigorous, transparent and conforms to accepted industry guidelines. The quality checks at every step of the process ensure the accuracy of your savings information.



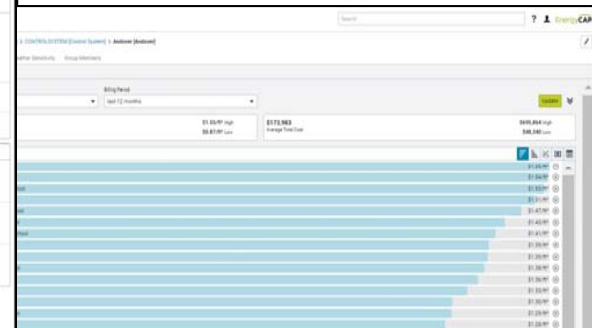
Measurement & Verification Process

- **Validation and Quality Processes**
 - IPMVP: International Performance Measurement and Verification Protocol
 - Center of Excellence (COE)
 - Internal Audit
- **Core Data Function**
 - Bill Capture and Processing
 - Analysis and Data Interpretation
 - Messaging and Reporting
- **Changing Conditions — Adjustments**
 - EnergyCAP®
 - Opti-Commissioning
 - Data Logging
 - Remote Verification

EnergyCAP — The Industry Standard



- Third-Party Software
- Used by City, State, and Federal Government Agencies
- Used by Fortune 500 Companies



- Environmental Stewardship
- Systemic Collaboration
- Messaging & Sustainability

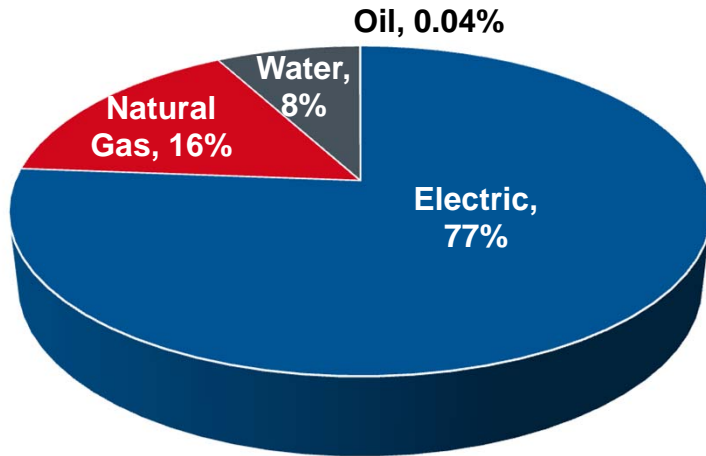
EnergyCAP®



Energy Profile Prior to Energy Program

Utility Cost Distribution

Base Year: February 2013 – January 2014

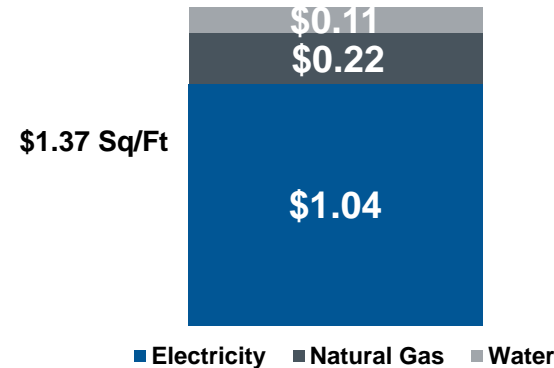


Total Utility Expenditures: \$36,791,304.91

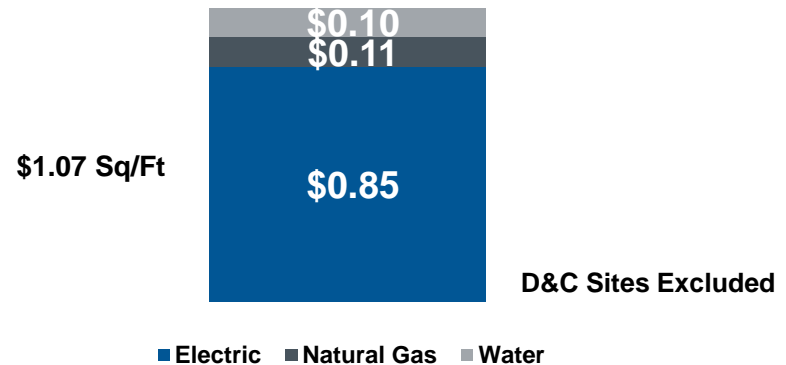
Key Dates

- Base Year: February 2013 – January 2014
- Quick Start Period: February 2014 – July 2014
- Performance Year 3: August 2016 – July 2017

Base Year Energy Cost Per Sq. Ft

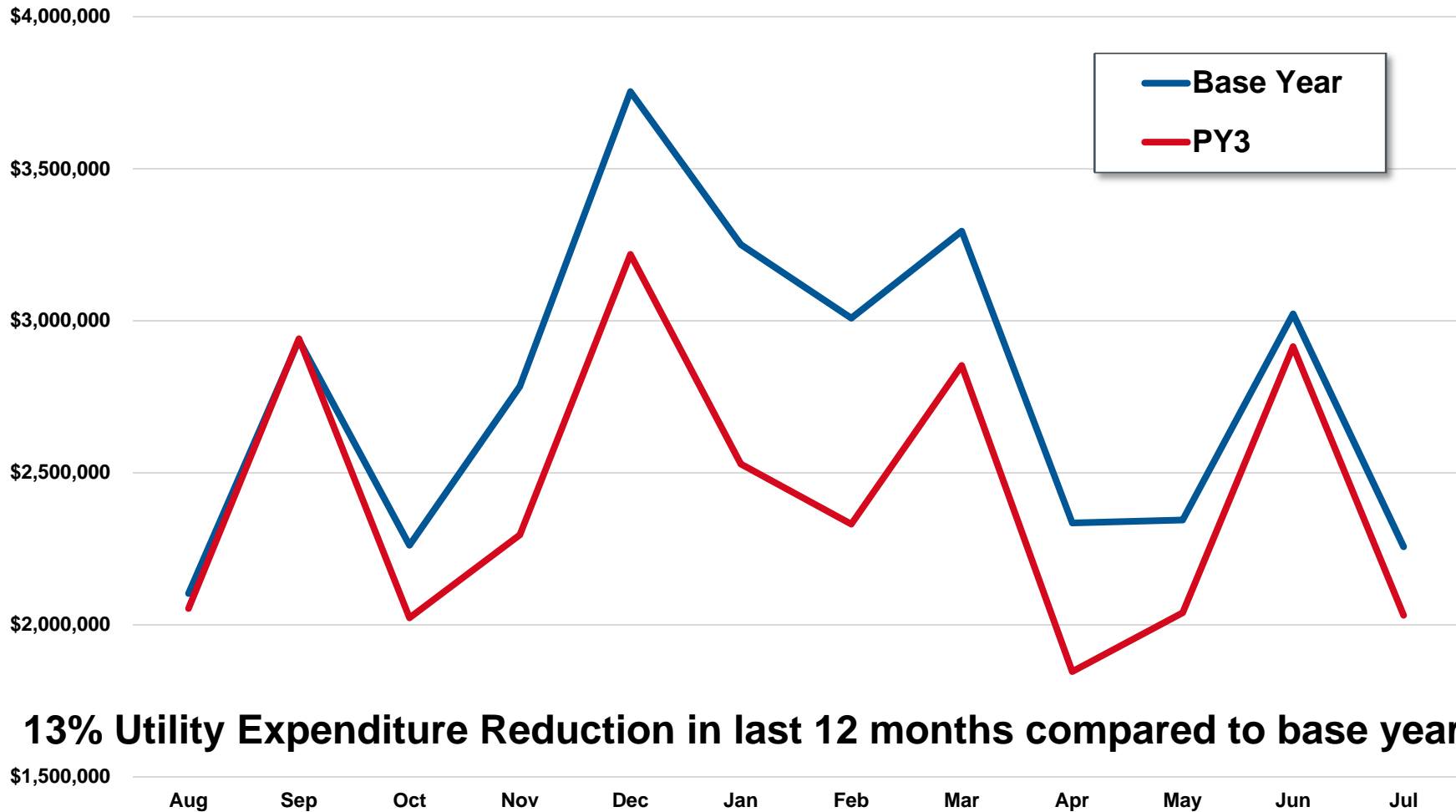


PY 3 Energy Cost Per Sq. Ft



FCPS All Commodities Cost Trend

FCPS Utility Expenditures

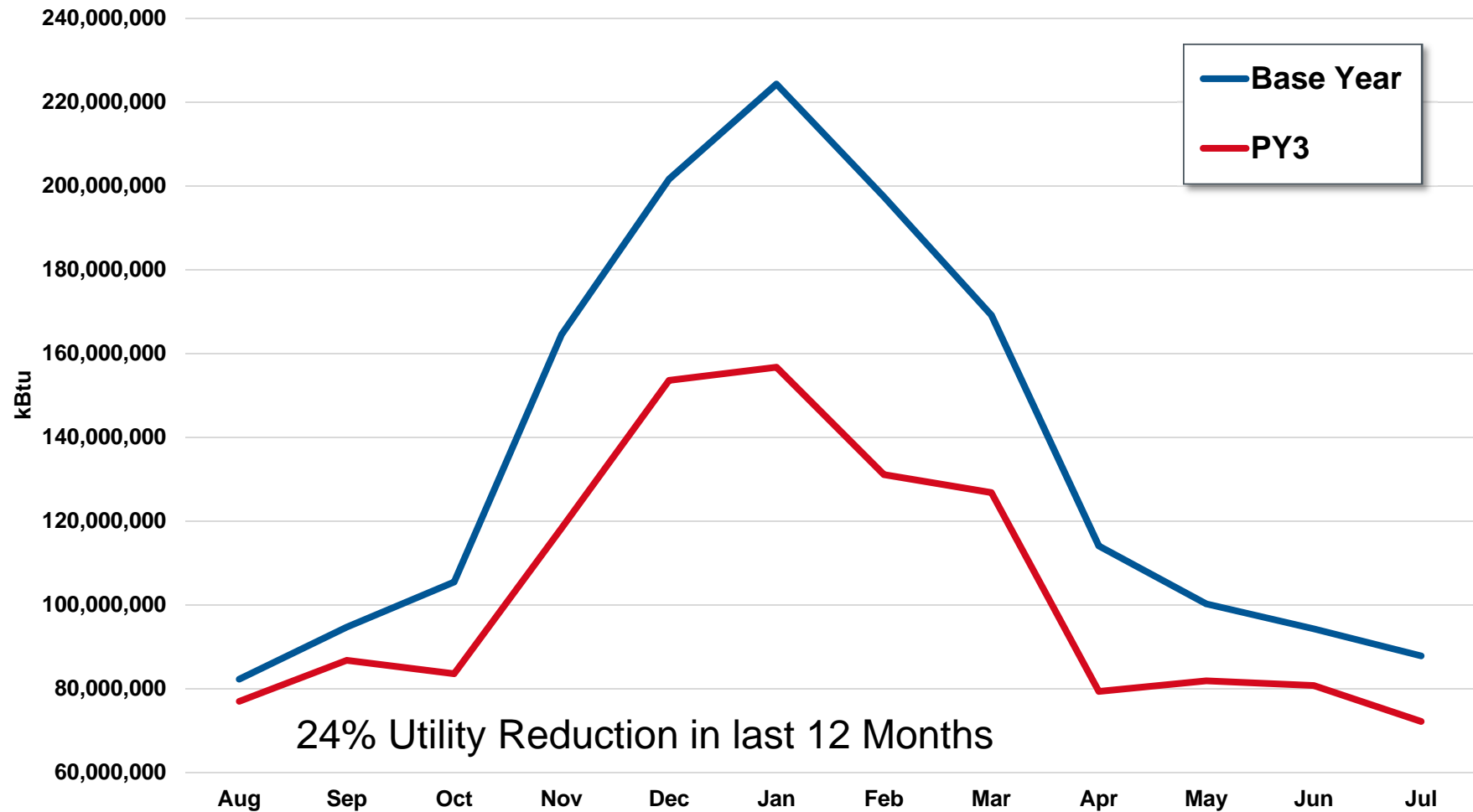


13% Utility Expenditure Reduction in last 12 months compared to base year

*** Design and Construction Sites Excluded**

FCPS Electric and Natural Gas Use Trend

FCPS Utility Consumption



* Design and Construction Sites Excluded

Energy Auditing — Foundation of the Process

Energy Auditing Goals

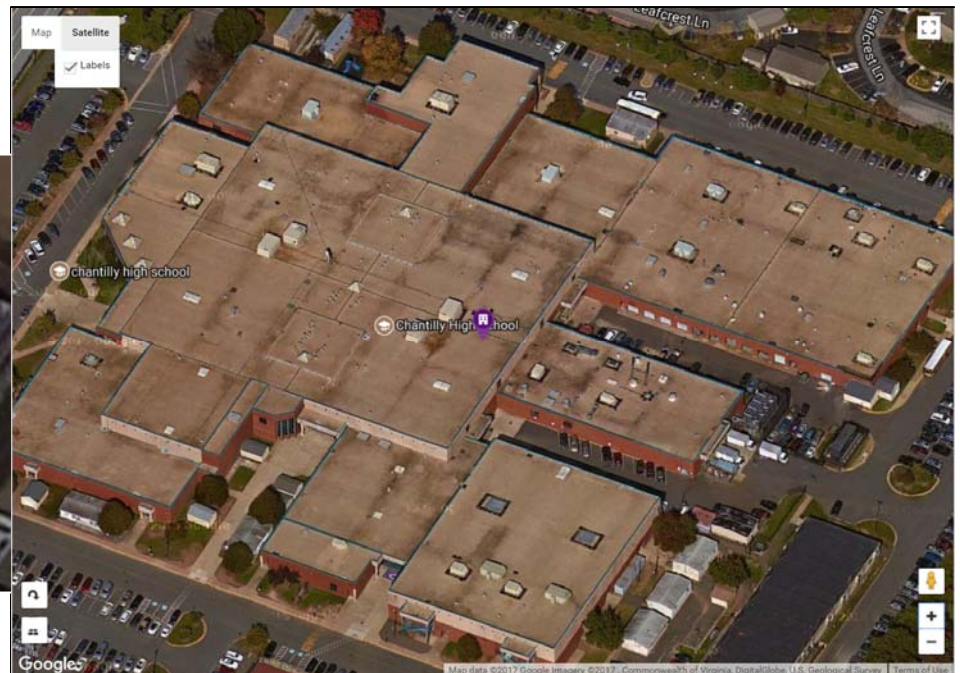
- ✓ **Third party software establishes an industry standard process**
 - ✓ Compliant tool to be the scorecard for the program
- ✓ **Use a base year prior to the energy program as a basis to determine savings**
- ✓ **Adjust the base year's consumption for current conditions**
 - ✓ Corrects for changing conditions
 - ✓ Engages Client Partnership and Point of Contact
 - ✓ Justin Moss – Point of Contact (Energy Management Section)
 - ✓ Establishes an “adjusted baseline”
- ✓ **Compare the energy in the performance year to the adjusted base line**
 - ✓ Process determines the performance period savings
- ✓ **Report the performance period savings**
 - ✓ Based on the consumption avoidance
 - ✓ Valued at the current cost of utilities

M&V Adjustment Process

Example — Chiller Replacement

Identification and Scoping

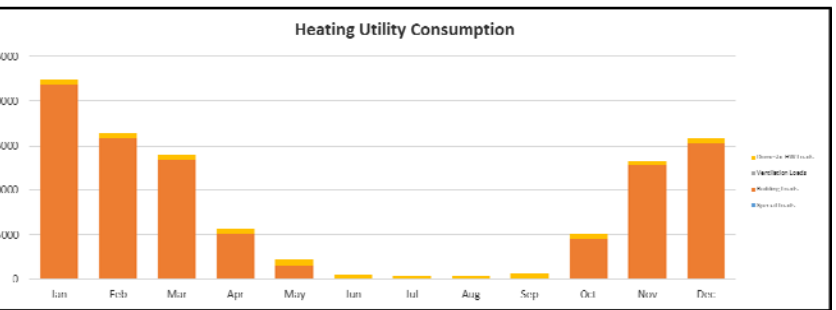
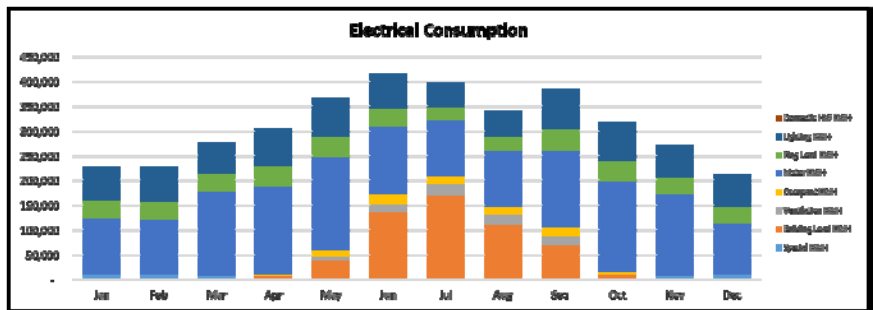
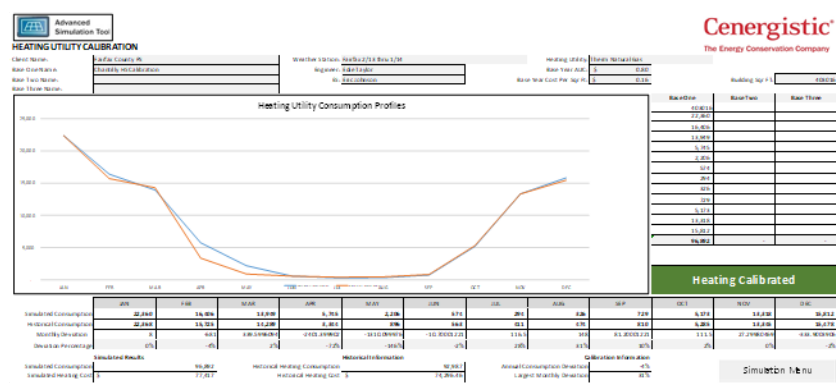
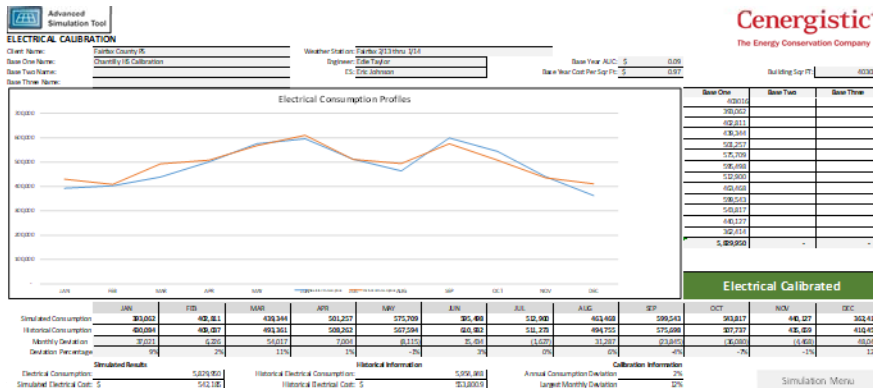
- ✓ **Project:** Chantilly High School Chiller Replacement
- ✓ **Scope of work:** Replacement of two main chiller units.
- ✓ **Expected Outcome:** Saving energy through mechanical system efficiency (COP) improvement



Example — Chiller Replacement

Modeling to original

- ✓ Calibration — Model based on actual conditions in base year
- ✓ Utilizes proprietary patented modeling program AST
- ✓ Applies actual weather conditions in the base year
- ✓ Compares to actual billed energy use in the base year



Example — Chiller Replacement

Estimating effect

- ✓ In this case, a single element in the model was changed
- ✓ COP 3.4 change to 3.7
- ✓ Reduces cost to meet the modeled load
- ✓ Effect is reviewed and approved by client representative

Values are converted to use/day for entry into EnergyCAP

CS69 Case Number: **A-160627-2519**

Client Name: Fairfax County, PS
 Base One Name: Standilly HS Calibration
 Base Two Name: Standilly HS New Chiller
 Base Three Name:
 Modified Three:
 Description: Simulate energy change based on COP 3.4 to 3.7

Calibration Standard: Cenergistic Standard
 Historical Data Meter Square Footage: 603,016

	Base One	Base Two	Base Three	Base Total	Modified One	Modified Two	Modified Three	Modified Total	Difference	ECAP Monthly Adjustment (kWh/Day)
Square Footage	603,016			603,016	603,016			603,016		
January	393,061			393,062	393,062			393,062		
February	402,811			402,811	402,811			402,811		
March	439,344			439,344	439,344			439,344		
April	501,257			500,698	500,698			500,698	(559.0)	(19)
May	575,709			570,801	570,801			570,801	(4,907.7)	(158)
June	595,488			581,022	581,022			581,022	(14,475.3)	(483)
July	512,900			495,790	495,790			495,790	(17,109.5)	(552)
August	463,468			451,234	451,234			451,234	(12,233.6)	(395)
September	599,513			590,474	590,474			590,474	(9,038.6)	(296)
October	543,817			542,703	542,703			542,703	(1,114.0)	(36)
November	440,127			440,121	440,121			440,121	(6.0)	(0)
December	362,414			362,414	362,414			362,414		
Total	5,829,930			5,829,930	5,770,676			5,770,676	(59,274.1)	(1,912)

Adjustment: Sq Footage: 0.09
 Adjustment Annual kWh: \$59,274
 Adjustment Valuation: \$ (5,312)
 Adjustment Cost / Sq FT: \$ (0.01)
 Base Simulation Cost / Sq FT: \$ 0.97

ECAP Monthly Adjustment (kWh/Day): (1,912)

Electrical Calibrated

HEATING UTILITY ADJUSTMENT

	Base One	Base Two	Base Three	Base Total	Modified One	Modified Two	Modified Three	Modified Total	Difference	ECAP Monthly Adjustment (kWh/Day)
January	22,360			22,360	22,360			22,360		
February	16,406			16,406	16,406			16,406		
March	13,949			13,949	13,949			13,949		
April	5,745			5,745	5,745			5,745		
May	2,206			2,206	2,206			2,206		
June	574			574	574			574		
July	294			294	294			294		
August	326			326	326			326		
September	729			729	729			729		
October	5,173			5,173	5,173			5,173		
November	13,318			13,318	13,318			13,318		
December	15,812			15,812	15,812			15,812		
Total	96,891			96,892	96,892			96,892		

Heating Utility: Therm Natural Gas
 Heating AUC: \$ 0.80
 Adjustment Annual kWh: \$
 Adjustment Valuation: \$
 Adjustment Cost / Sq FT: \$
 Base Simulation Cost / Sq FT: \$ 0.49

ECAP Monthly Adjustment (kWh/Day): 0.49

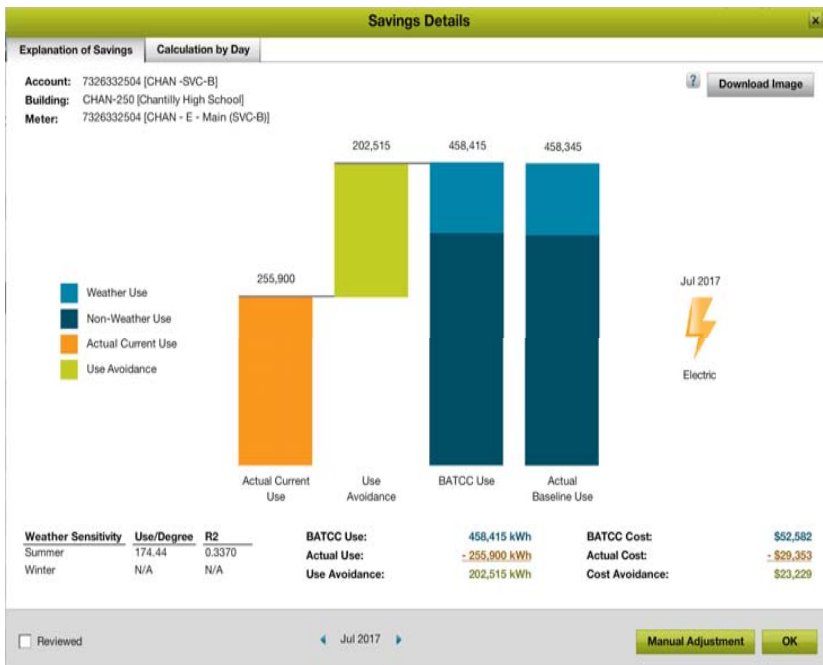
Heating Calibrated

Warnings:

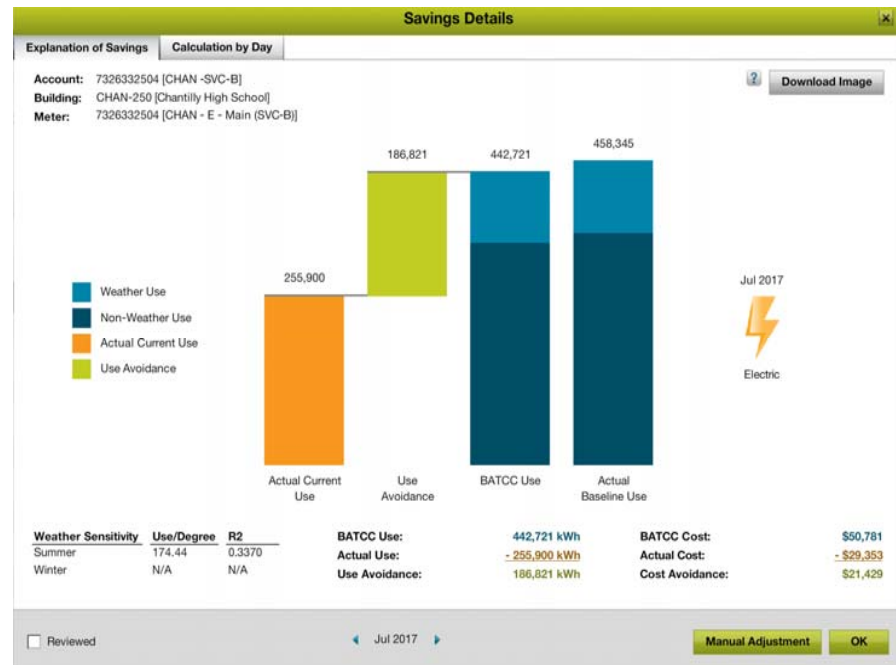
Example — Chiller Replacement

- ✓ Adjustments are applied at the meter level
- ✓ BATCC — corrected for 59,274 kWh upgrade efficiency
- ✓ Effectively removes efficiency upgrade from conservation efforts

Pre-Adjustment



Post-Adjustment



Energy Conservation Measures

Cenergistic Energy Specialists — Role

- Continual building presence with on-site audits
- Train one-on-one with Cenergistic engineers and consultants
- Match conditioning times to occupied times
- Work cooperatively with maintenance in field
- Plan strategically for extended breaks
- Communicate to teachers and staff
- Promote an “energy conservation culture”
- Schedule and monitor building automation system (BAS) and work with maintenance team



FCPS Energy Specialist Team:

Front: Henry Miller, Molly Fox, Debra Maes, Nora Marrero

Back: Tommy Meier, Mark Merrell, Sharon Wood, John Lingenfelter, Eric Johnson

Energy Behavior Change

- **Robinson Secondary School**

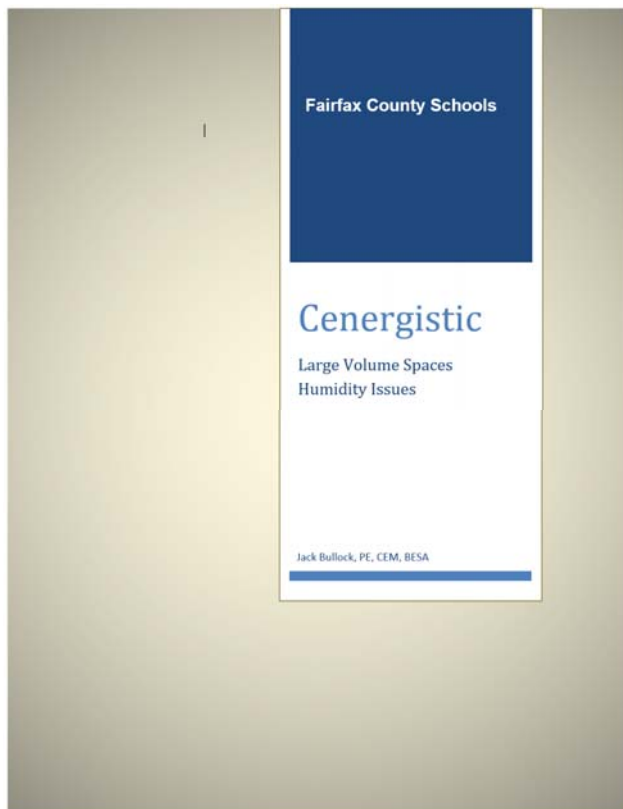
- Over 500,000 sq. ft.
- Significant lighting control opportunity

- **CES Nora Marrero**

- worked with the custodial teams on lighting control strategies during evening hours
- Electrical savings have increased due to behavior change
- April through July 2017: 5% savings increase compared to 2016

Cenergistic Engineering

- Development of optimization opportunities
- Assist with client-driven adjustments
- Provide technical support for issues



Cenergistic Relative Humidity Study

- Initiated by FCPS to address seasonal RH issues
- Core control issue identified and resolution proposed
- Ventilation issue identified
- Drainage issue identified
- Optional control option proposed

Cenergistic Technology

Tools centered around the Cenergistic Energy Specialist



Cenergistic Command Center

Tablet-based energy
program management



Cenergistic Enhanced Product Offering

New client-facing energy
program dashboard portal with
VIT and AST



Visual Inventory Tool

Opti-Commissioning
Tool finds system
faults



Advanced Simulation Tool

AST separates
equipment from
behavioral savings.



Interval Analytics Tool

Uses smart meter data to
find hidden savings
opportunities



Remote Engineering Verification

REVs deliver
“on demand”
engineering support.



Next Steps

Moving Forward

Strengths Moving Forward

- **Staff Acceptance & Support**
 - ✓ Site Administrator and Plant Managers
 - ✓ Educators and Supervisors
 - ✓ Custodial
- **Technical & Engineering**
 - ✓ Energy Management Action Plans
 - ✓ Effective Site Assessment & Partnerships
 - ✓ Strategic Goals — Developed/Delivered
- **Project Planning & Integration**
 - ✓ Adapting to Facility Use
 - ✓ Active Building Management
 - ✓ Realize Significant Savings Potential

Opportunities

- **Building Automation Systems**
 - ✓ Legacy Automation Controls
 - ✓ Micro Zoning Projects
- **Construction & Modernization**
 - ✓ Project Planning and Coordination
 - ✓ Adapting Energy Program to remodeling/modernization
- **Facility Use Management**
 - ✓ Integration of Countywide Process
 - ✓ Comfort tracking feedback

Future Goals

- Achieve Energy Use Index (EUI) of 45 kbtu per sq/ft
- Stretch to 30%+ Cost Avoidance
- Reduce FCPS annual utility budget by an additional \$3MM
- Expand ENERGY STAR Certification to all 250 FCPS campuses

FPAC Agenda
December 5, 2017
Room 5050, Gatehouse Administration Center
7:00 – 9:00 pm

Meeting Opening/Announcements

Community Time

Opportunity for the public to address the Council.

Staff Announcements

Staff Presentation/Discussion

Capital Improvement Plan (CIP) discussion and timeline.

Approval of Meeting Minutes

Old Business

FPAC Work Plan for 2017-2018 and committee updates.

New Business

Approval of 2018-19 FPAC meeting dates.

Member Time

Adjournment

Note: The officers will hold a coordination meeting, prior to the full session, from 6:30-7:00 pm in room 3415. Open to all.

MINUTES

Facilities Planning Advisory Council (FPAC)

Regular Meeting
2017-18 School Year

December 5, 2017

The meeting convened at 7:02 pm in Room 5050 of the Gatehouse Administration Center.
The following FPAC members attended:

Charles Hookey	<i>Braddock/Secretary</i>	Ian Kelly	<i>Springfield</i>
Jay Reddy	<i>Dranesville</i>	Kristen Hyatt	<i>Sully</i>
Howard Perlstein	<i>Hunter Mill</i>	Melina Duggal	<i>At Large</i>
Dan Aminoff	<i>Mason/Vice Chair</i>	Karen Hogan	<i>At Large/Chair</i>
Scott Higgins	<i>Mt. Vernon</i>	Dave Phillips	<i>At Large</i>
Kate Howarth	<i>Providence</i>	Allen Griffith	<i>Fairfax City</i>

FCPS Staff:

Kevin Sneed, *Special Projects Administrator for Facilities and Transportation Services*
Jessica Gillis, *Director for Facilities and Transportation Services*

Meeting Opening

Community Time

No community time was requested.

Minutes

Minutes from the November 7, 2017 FPAC meeting were approved as amended.

Meeting Dates 2018-19

Meeting dates for the 2018-19 school year were approved. (attached)

Staff Announcements

Sneed announced that the draft Capital Improvement Program (CIP) for 2019-2023 will be posted to Board Docs the week of December 11th. He briefly discussed some highlights, in particular the fast-growing student population in the north/west area of the county where FCPS may end up with six elementary schools within one-half mile of each other.

He remarked that the “dashboard” is a valuable information source and will be updated to reflect information from the CIP.

Gillis discussed the Membership Analysis and Trends. Highlights included a lower-than-expected birth-to-kindergarten ratio (83%), which resulted in (only) a 1% (1,006 students) increase in membership, all at the middle and high-school levels. Overall, membership is expected to grow over the next three years, with “capacity pressure” at the higher grades.

Further remarks included the probability of re-purposing the Pimmit Hills and Dunn Loring facilities as schools (Tysons development), the growing challenge of transportation along Georgetown Pike (from the Loudoun Co. border to Cooper MS and Langley HS), the challenge of guessing what and when developers may actually build, and the challenge that the FAR (Floor Area Ratio) limits impose on proposed FCPS facilities as the area morphs to a substantially more urban environment and the consequently tighter and more expensive land options.

Sneed called attention to the section of the CIP that suggests boundary changes as solutions for overcrowding and requested that after FPAC is able to review same, provide guidance/suggestions, based on its apolitical vantage point and public engagement.

Old Business

There was discussion regarding the November Cenergistic presentation which provided input for a forth-coming FPAC report to the School Board, as it requested in its 'charge' to FPAC this year. Hogan will draft and submit said report.

New Business

There was no new business.

Member Time

Kelly reported on his meeting with School Board member Schultz and an up-coming meeting with FCPS budget analyst Kristin Michaels (continuing maintenance-funding issues).

Adjournment

The meeting was adjourned at 9:20 pm.

FPAC Agenda
January 2, 2018
Room 5050, Gatehouse Administration Center
7:00 – 9:00 pm

Meeting Opening/Announcements

Community Time

Opportunity for the public to address the Council.

Staff Announcements

Staff Presentation/Discussion

Capital Improvement Plan (CIP) discussion and timeline.

Approval of Meeting Minutes

Old Business

FPAC Work Plan for 2017-2018 and committee updates.
Cenergistic presentation follow-up.

New Business

Capital Improvement Plan (CIP) 2019-2023
Preparation for Semi-Annual Report to School Board
FPAC Retreat (February 24, 2018)

Member Time

Adjournment

Note: The officers will hold a coordination meeting, prior to the full session, from 6:30-7:00 pm in room 3415.
Open to all.

MINUTES

Facilities Planning Advisory Council (FPAC)

Regular Meeting
2017-18 School Year

January 2, 2018

The meeting convened at 7:06 pm in Room 5050 of the Gatehouse Administration Center.
The following FPAC members attended:

Charles Hookey	<i>Braddock/Secretary</i>	Ian Kelly	<i>Springfield</i>
Jay Reddy	<i>Dranesville</i>	Kristen Hyatt	<i>Sully</i>
Howard Perlstein	<i>Hunter Mill</i>	Karen Hogan	<i>At Large/Chair</i>
Dan Aminoff	<i>Mason/Vice Chair</i>	Dave Phillips	<i>At Large</i>
Scott Higgins	<i>Mt. Vernon</i>	Allen Griffith	<i>Fairfax City</i>
Kate Howarth	<i>Providence</i>		

FCPS Staff:

Kevin Sneed, *Special Projects Administrator for Facilities and Transportation Services*
Jessica Gillis, *Director for Facilities and Transportation Services*

Meeting Opening

Hogan welcomed guest(s) and noted that the FPAC Semi-Annual report presentation is scheduled for the school board work session on Monday, February 12, time TBD. The substantive content of the report is expected by Friday, January 26, for Board Docs.

Hogan also reminded members of the FPAC Retreat on Saturday, February 24, 2018 from 8:30am – 3pm at TJHSST.

Community Time

No community time was requested, however, Randy Hoff, Vice Chairman of Cenergistic was present and asked to speak to the Council.

Hoff reiterated that the joint efforts of Cenergistic and FCPS continue to save FCPS money on energy costs. He noted that while ultimately (very) successful, the program was costly to Cenergistic in the beginning (2013-14), to the tune of some \$500,000. He reminded us that the remuneration to Cenergistic goes down to 40% of calculated savings (from 50%) when total program savings reaches \$20M. He expects to reach that mark in March 2018. (The contract runs through July 2019.) Hoff said he is anxious/willing to speak with/report to the School Board at any time.

Minutes

Minutes from the December 5, 2017 FPAC meeting were approved.

Staff Announcements

Sneed noted that the draft Capital Improvement Program (CIP) for 2019-2023 is now available on-line, will be on the public hearing schedule on Tuesday, January 9, discussed at a school board work session on Monday, January 22, and up for approval by the School Board on Thursday January 25.

Sneed again called attention to the section of the CIP that suggests boundary changes as solutions for overcrowding and requested that after FPAC is able to review same, provide guidance/suggestions, based on its apolitical vantage point and public engagement. He noted that while some boundary adjustments can be made using administrative procedures, such are subject to coordination with school board members, the schools and the community. There was discussion of the

creation of “triggers” for automatic boundary adjustments, thus relieving SB members of political considerations (as suggested by FPAC in its 2012 Strategic Facilities Plan), but practical (geographic) and political (home value) arguments continue to obfuscate implementation of such hard-and-fast guidelines.

There was discussion of the square-foot-per-student ratio, which varies depending on the facility, and whether there is any statistical information on its relationship to student learning, performance, or safety. (New facilities are designed at 105 sf/student.) Sneed noted that efficiency in design allows for a less overall sf/student number, at least compared to FCPS history.

Sneed spoke of the CIP-outlined additions at West Potomac, Madison, and Justice (Stuart) high schools. He noted that the eventual overall square footage at Madison and W. Potomac may exceed historical thinking, increasing at Madison from 2,350 to 2,500 square feet, and at W. Potomac from 2,900 to as much as 3,100 square feet. Sneed noted that addition(s) at Justice will require some re-zoning (Board of Supervisors matter) to facilitate FAR (floor-area-ratio) adjustment(s).

There was further discussion about boundary adjustments. Higgins asked how long it takes for a boundary adjustment to fully take effect. Sneed said about five years, given program and pupil placement changes, and grandfathering considerations. Referencing the CIP, Perlstein commented on the lack of funds to renovate schools on the stated 25-year cycle (it's now at 37 years). Sneed answered that to maintain a 25-year cycle the annual borrowing cap would have to increase from the current \$155M to \$242M, and that would not include “catch-up” dollars for the existing backlog. In response to Griffith, Sneed noted that a \$.01 increase in the property tax rate generates about \$20M (for purposes of debt servicing).

Old Business

Hogan reported on her development of the FPAC memo to the School Board regarding the Cenergistic program. The memo is attached. There had been no feedback to Hogan/FPAC to date. Hogan encouraged members to reach out to their SB members and offer background and findings regarding the program.

New Business

There was discussion regarding the Saturday, February 24th retreat. A more detailed agenda will be developed at the February FPAC meeting. Scott Higgins volunteered to seek out a keynote speaker, possibly one who could speak to any “facility (condition/size) – to – student performance/outcome(s)”, facility – to – neighborhood value statistic, or the ways people learn vis-a-vis a traditional school setting or some off-site learning situation.

In regard to the Semi-Annual report, it was suggested by Hogan that this be, as has been the case historically, an opportunity for a “conversation” with, as much as a report to, the School Board. It was decided that the focus of such a conversation should be facility maintenance and the under-funding thereof. The fiduciary obligation on school board members to take care of school facilities and how they might best articulate the looming crisis to funders (Board of Supervisors) could be primary talking-points at the meeting.

Member Time

Griffith and Hyatt plan to meet with Sneed and Gillis on Friday, January 5th regarding their committee work on long-range planning.

Kelly distributed a handout which outlines a proposed set of asset management guiding principles, what such would promote, and an asset management policy. Feedback and comment on this effort from stakeholders before the FPAC retreat would be valuable for further discussion by FPAC at the retreat. Hogan and Kelly will try to arrange/encourage responses from the FCPS Facilities leadership and staff.

Adjournment

The meeting was adjourned at 9:22 pm.

FPAC Agenda
February 6, 2018
Room 5050, Gatehouse Administration Center
7:00 – 9:00 pm

Meeting Opening/Announcements

Community Time

Opportunity for the public to address the Council.

Staff Announcements

Staff Presentation/Discussion

Approval of Meeting Minutes

Old Business

School Board Approved CIP
Semi-Annual Report to School Board
FPAC Retreat Planning

New Business

Environmental Stewardship
Facebook presence

Member Time

Adjournment

Note: The officers will hold a coordination meeting, prior to the full session, from 6:30-7:00 pm in room 3415.
Open to all.

MINUTES

Facilities Planning Advisory Council (FPAC)

Regular Meeting
2017-18 School Year

February 6, 2018

The meeting convened at 7:03 pm in Room 5050 of the Gatehouse Administration Center.
The following FPAC members attended:

Charles Hookey	<i>Braddock/Secretary</i>	Ian Kelly	<i>Springfield</i>
Jay Reddy	<i>Dranesville</i>	Kristen Hyatt	<i>Sully</i>
Howard Perlstein	<i>Hunter Mill</i>	Melina Duggal	<i>At Large</i>
Dan Aminoff	<i>Mason/Vice Chair</i>	Karen Hogan	<i>At Large/Chair</i>
Scott Higgins	<i>Mt. Vernon</i>	Dave Phillips	<i>At Large</i>
Kate Howarth	<i>Providence</i>	Allen Griffith	<i>Fairfax City</i>

FCPS Staff:

Kevin Sneed, *Special Projects Administrator for Facilities and Transportation Services*
Jessica Gillis, *Director for Facilities and Transportation Services*

Meeting Opening

Community Time

Kathy Hosek from the W. Potomac HS community represented its concern over the CIP-projected 129% of capacity estimate for W. Potomac HS by 2023.

Christine Lorelli from the Rolling Valley area, Don Bitner from the Whitlers Creek neighborhood, Julie Ambrose from the Presidential Hills neighborhood, and Patty Steele from the Donnegal Oaks neighborhood all spoke of collective concern regarding the ES/MS/HS split-feeder situation(s) involving Rolling Valley ES and Irving & Key MS, and, subsequently, W. Springfield & Lee HS. They commented on the “crazy” bus accommodation to transport children to (oddly) assigned schools and loss of cohort preservation as detrimental. To their minds, this could be “easily” remedied with (administrative) boundary adjustments.

Minutes

Minutes from the January 2, 2018 FPAC meeting were approved.

Staff Announcements

Sneed reviewed with members the January 22, 2018 CIP Work Session with the school board. The two primary takeaways were: 1) School Board members will work with staff over the next weeks to expand the list of Priority Recommended Boundary Adjustments on Page 46, and 2) will formally ask the Board of Supervisors to increase by \$50M the annual bond (borrowing) limit, from \$155M to \$205M. (It was shared that Montgomery Co. MD allocates \$300M annually for capital expenditures.) Perlstein noted that as long as there are “enough” seats (maybe not in the right place) for the total FCPS enrollment, it’s going to be hard to get more money from the County. Boundary adjustments are “free”.

Sneed noted the difficulty in garnering agreement among all concerned with administrative boundary changes.

In response to SB members’ requests, Gillis is surveying other (neighboring) school jurisdictions to see how they handle “smaller” boundary adjustments, attendance-island, and split-feeder situations. It was noted that FCPS has approximately 54 split-feeder situations, mostly involving elementary

schools splitting students to two different middle schools. Gillis also is beginning work on the next iteration of student enrollment projections, using current attendance figures.

Old Business

Hogan provided comment on FPAC's Semi-Annual report (in draft form), which focuses on the growing deferred major-maintenance crisis. This will be finalized over the next days and presented to the SB at its February 12th Work Session. The draft report, including the recommendations, was approved by FPAC members.

The agenda for the FPAC retreat on Saturday, February 24th at TJHSST was discussed. Higgins reported that he had lined up the keynote speaker: Mary Filardo, Executive Director and founder of the 21st Century School Fund, begun in 1994 to provide the District of Columbia and other urban communities with leadership, innovative financing solutions, research, and public policy analysis of school facility issues.

New Business

Hogan suggested that FCPS Chief Academic and Equity Officer Francisco Duran be invited to speak at the March or April FPAC meeting regarding delivery of program services in school facilities, if he is unable to attend the retreat.

Hogan noted that the recently scheduled meeting of the SB's CPDC, which she attended, failed to convene a quorum.

Hogan announced that FPAC Members Chris Nunneville (Lee) will resign when a replacement is named and Kristen Hyatt (Sully) will not be standing for reappointment to FPAC when her term expires at the end of this school year.

Member Time

Kelly led a short discussion on the continuing challenge of (encouraging) school roof installation of photovoltaic cell panels. He also brought up the possibility of a Facebook presence for FPAC to expand community input. Aminoff said he would check with FCPS communications department regarding parameters for use of Facebook.

Perlstein suggested FPAC ask Sneed (as time permits) whether there is a way to calculate the cost of the AAP Center program vs. having Local Level IV in each ES, and whether an adjustment in the delivery of the AAP program might be a source of funds for use elsewhere (e.g., maintenance).

Hogan shared that she was copied on the notice of a meeting between Randy Hoff (Chairman, Cenergistic) and Superintendent Brabrand and FTS staff later in the month.

Adjournment

The meeting was adjourned at 9:12 pm.

Fairfax County Public Schools
Facilities Planning Advisory Council (FPAC)
Winter Retreat

Saturday, February 24, 2018
Thomas Jefferson HS for Science & Technology
Library (2nd Floor), Entrance 1
8:45 am - 3:00 pm

Agenda

- 8:45 am Gather (Main Lobby)
- 9:00 Building Tour for FPAC Members
- 10:15 Meeting Opening/Announcements (Library, 2nd Floor)
- 10:20 Keynote Address: Mary Filardo
School Facilities in the 21st Century

Mary Filardo is a leading national authority and advocate for improving the equity, efficiency and quality of public school facilities. She founded the 21st Century School Fund in 1994 to improve the policies and practice for planning, design, construction, management and financing for the District of Columbia Public Schools and then in 2001 started Building Educational Success Together (BEST) to work nationally on these issues.

Discussion on Keynote Address

- 11:30 Community Time
(up to three minutes for each community member to speak)
- 12:15 pm Lunch
- 1:00 FPAC Committee Meetings/Breakout Sessions
Major Maintenance
Long-range Comprehensive Planning
Boundaries Impact of New Western HS
- 2:00 Committee Reports
- 2:45 Wrap-up and Next Steps
- 3:00 Adjournment

MINUTES

Facilities Planning Advisory Council (FPAC)

RETREAT
2017-18 School Year

February 24, 2018

The meeting convened at 10:05 am in the library of Thomas Jefferson High School for Science & Technology, following a 9:00 am tour of the facility. The following FPAC members attended:

Charles Hookey	<i>Braddock/Secretary</i>	Kristen Hyatt	<i>Sully</i>
Jay Reddy	<i>Dranesville</i>	Melina Duggal	<i>At Large</i>
Howard Perlstein	<i>Hunter Mill</i>	Karen Hogan	<i>At Large/Chair</i>
Dan Aminoff	<i>Mason/Vice Chair</i>	Dave Phillips	<i>At Large</i>
Kate Howarth	<i>Providence</i>	Allen Griffith	<i>Fairfax City</i>

FCPS Staff:

Kevin Sneed, *Special Projects Administrator for Facilities and Transportation Services*
Jessica Gillis, *Director for Facilities and Transportation Services*

Meeting Opening

Hogan opened the meeting and introduced the keynote speaker Mary Filardo, and her colleague Jim Wilson.

Keynote Address

School Facilities in the 21st Century

Mary Filardo is a leading national authority and advocate for improving the equity, efficiency and quality of public school facilities. She founded the 21st Century School Fund in 1994 to improve the policies and practice for planning, design, construction, management and financing for the District of Columbia Public Schools and then in 2001 started Building Educational Success Together (BEST) to work nationally on these issues.

Jim Wilson founded JFW, Inc. in 1992 as a hands-on project management firm that has specialized in delivering projects with significant schedule, cost, and quality constraints. The JFW team includes Project Executives, project Managers, Estimators and accounting personnel. In the past 23 years, the JFW team has completed over 250 projects totaling over \$3 billion. Wilson has provided advice and strategic input, based on critical field experience, to the 21st Century School Fund for over 25 years.

The PowerPoint presentation outlining Filardo's remarks is attached. Filardo presented ideas in support of the Fund's mission to build "the public will and capacity to modernize public school facilities so they support high quality education and community revitalization". Among her ideas:

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

Community Time

No community members were present.

Breakout Sessions

Two groups developed after lunch. One focused on long-range comprehensive facility planning and the other on the impact of wide-ranging boundary adjustments (the “nuclear” option) which could be triggered by the opening of a new high school on the western side of the county in the next decade or so. Their reports are attached.

Wrap-Up and Next Steps

There were summary reports from the breakout groups. It was agreed that members would consider what was presented and “next steps” would be formulated at the next regular meeting.

Adjournment

The meeting was adjourned at 3:15 pm.

(On the following two pages are notes from the two break-out groups.)

21st Century Schools – Vision/Facilities – Subgroup Discussion of 2/24/2018

Griffith, Hookey, Howarth, Hyatt

What will not change – role of public schools?

- Role in socializing children, helping them become good citizens, productive members of society
- Safe care for children when parents are working
- Identifying kids in need of assistance, prevent kids falling through cracks

What may change – role of public schools?

- Facilities need to support ways of learning – project based, harnessing technology, inspire creativity
- Provide skills needed for future jobs for college and non-college bound
- Work within resource constraints -- \$, land, etc.

Actions for facilities?

- Build nimbly, flexible spaces
- Ensure good fundamentals such as light and air quality
- Footings strong enough to build up in future
- Design spaces with partitions for community mixed use
- Don't sell county assets; buy commercial when cheap

Other ideas facilities/changes in instruction?

- Longer school days with afterschool integrated
- Public/private partnerships for vocational education
- Varied school times
- Integrate school locations with county transportation/bus lines
- Different class structures – large lectures with break-out sessions
- Integrate with community colleges/AP
- Self-directed learning on technology

Looking at the "Nuclear Option" – Subgroup Discussion of 2/24/2018

("Nuclear Option" is an FPAC-coined term for the county-wide review of school attendance boundaries.)

Aminoff, Duggal, Hogan, Perlstein, Phillips, Reddy

1. Are capacity requirements showing a need for a new High School?
 - a. Add projected growth from new development, esp. along Silver Line corridor
2. Is the Hutchinson site located where capacity will be needed?
3. When will the new school be needed?
 - a. Put planning \$ in the 2019 bond, and construction \$ in the 2021 bond?
4. Assess impact on high school boundaries
 - a. Use an automated system to "optimize" use of capacity
 - i. Parameters: school capacity and target % utilization; major highways
 - ii. Minimize cost and time of transportation
 - b. Examine MS and ES that would be included in the HS pyramid
 - i. Preserve cohorts
 - c. Then, look at socio-economic impacts
5. "Marry" program changes with boundaries to help make boundary changes more palatable
6. Next steps
 - a. Determine availability of software
 - b. Recommend use of graduate student for Optimizing Boundaries
 - c. Obtain growth projections – add County projected growth and data from new building permits to CIP projections
7. Issues to be considered:
 - a. 10 year horizon
 - b. Begin discussions now – develop FCPS Communications Plan
 - c. Begin consideration of how to deal with socio-economic effects
 - d. Consider aligning Middle Schools to High Schools 1:1 in each pyramid
 - e. Consider how to solve capacity issues in the interim

FPAC Agenda
March 6, 2018
Room 5050, Gatehouse Administration Center
7:00 – 9:00 pm

Meeting Opening/Announcements

Community Time

Opportunity for the public to address the Council.

Staff Announcements

Staff Presentation/Discussion

Approval of Meeting Minutes

Old Business

FPAC Retreat Summary/Next Steps
Facebook presence

New Business

Asset Management/APPA
Question prep for April speaker (Dr. F. Duran, Chief Academic and Equity Officer)

Member Time

Adjournment

Note: The officers will hold a coordination meeting, prior to the full session, from 6:30-7:00 pm in room 3415.
Open to all.

MINUTES

Facilities Planning Advisory Council (FPAC)

Regular Meeting
2017-18 School Year

March 6, 2018

The meeting convened at 7:03 pm in Room 5050 of the Gatehouse Administration Center.
The following FPAC members attended:

Charles Hookey	<i>Braddock/Secretary</i>	Kristen Hyatt	<i>Sully</i>
Howard Perlstein	<i>Hunter Mill</i>	Melina Duggal	<i>At Large</i>
Dan Aminoff	<i>Mason/Vice Chair</i>	Karen Hogan	<i>At Large/Chair</i>
Kate Howarth	<i>Providence</i>	Dave Phillips	<i>At Large</i>
Ian Kelly	<i>Springfield</i>	Allen Griffith	<i>Fairfax City</i>

FCPS Staff:

Kevin Sneed, *Special Projects Administrator for Facilities and Transportation Services*

Meeting Opening

Community Time

Elizabeth Brewer joined February guests Christine Lorelli from the Rolling Valley area and Don Bitner from the Whitlers Creek neighborhood, again expressing their collective concern regarding the ES/MS/HS split-feeder situation(s) involving Rolling Valley ES and Irving & Key MS, and, subsequently, W. Springfield & Lee HS. They pointed out the (wasteful) transportation resources and bus routes being used to accommodate this odd boundary alignment. They suggested that the unnecessary bus time and separation from neighborhood friends are emotionally detrimental to the children. (Sneed remarked that there are more than 50 of these split-feeder situations scattered throughout the county.)

Minutes

Minutes from the February 6, 2018 FPAC meeting were approved.

Staff Announcements

Sneed reported that for fiscal year 2020 the annual bond borrowing limit for capital projects is projected to increase by \$25 million, from \$155M to \$180M. He also said that he expects bids for upcoming projects to be higher than projected, as the number of bidders declines.

Sneed reported that Page 46 of the CIP (list of priority boundary adjustment study areas) is now complete and that the final version of the new CIP will be printed over the next week. FPAC members will receive copies at the April meeting.

Sneed reported that Jessica Gillis is preparing a report for the school board on restructuring the FCPS policies and regulations for boundary adjustments, with the goal of a more algorithmic-driven decision-making process. Further, a trial run of Virginia-Tech developed software that shows the impact of boundary changes on a neighborhood-by-neighborhood (student planning area; SPA) basis will be used as a tool in the upcoming effort to relieve overcrowding at Vienna ES.

Old Business

Aminoff reported on his inquiry of FCPS communication specialist John Torre regarding the use by FPAC of Facebook, as a community input resource. Torre will research and get back to Aminoff/FPAC. FPAC member Kelly volunteered to assist if/when this develops.

Hogan led a discussion on Next Steps and follow-up from the FPAC retreat held on February 24th. The minutes from the retreat were discussed and will be compiled, finalized, and approved at the April FPAC meeting.

New Business

Hogan led a discussion regarding FPAC's April meeting speaker Francisco Duran, FCPS Chief Academic and Equity Officer, and what questions we could request that he address. The focus was on how FCPS is preparing for "21st Century" school facilities.

- Griffith offered that addressing the "what, where, when, and how" FCPS is preparing would be a good outline. Also, what coordination has there been between Instructional Services (IS) and Sneed's report "A Look Ahead at 21st Century Schools".
- Perlstein suggested asking whether FCPS had ever spoken with newly minted teachers (or their mentors at various universities) regarding new education methods and the facilities needed to support them. Additionally he remarked on the necessity to foster "thinking" rather than "fact consumption" and how can this be supported by facilities.
- Kelly suggested to start by defining the "problem" (is there a problem?) in FCPS regarding "future" schools, and possibly using "the latest" trending topics of "managing scarcity" and "managing opportunity". FCPS should be investigating whether the historical model for educational delivery is valid in the 21st Century.
- Hookey mentioned that the ever-increasingly diverse student population, with its wide-ranging needs (ESOL, AAP, SPED, etc.) creates the need for more specialized educational efforts in more segmented environments which may not fit into the cookie-cutter facilities we're starting with.
- Howarth added there must be a "flexibility of mindset" when it comes to facility design.

Kelly updated members on his efforts to draft some sort of presentation for the SB regarding asset (facility) management with the goal of underscoring the chronically underfunded maintenance budget and the consequences thereof. His previous effort was "too" comprehensive, and that possibly a more concise "executive summary"-like document might be a "next step" in this effort. Hogan added that the additional "argument" of how maintenance affects the delivery of education should also be a part of such a SB message and that a comprehensive asset management plan would include the impact of the programs and other affected areas like transportation.

Member Time

Perlstein reported on a meeting he had with Sneed, school board member Pat Hynes and county supervisor Cathy Hudgins (Hunter Mill). There was discussion of the county initiative "One Fairfax" which promotes equitable availability of county resources and how such might apply to better "equality" among individual school offerings, including advanced academic programs, particularly at the elementary level. They also discussed developer proffers for school construction and how such should be "improved", particularly given the large redevelopment efforts coming in the Metro Silver Line and Rt. 1/Richmond Hwy. corridors.

Hogan reported on her attendance at the most recent School Board Comprehensive Planning Development Committee meeting. The Committee is working on a new charter to increase its involvement with facilities and the CIP.

Adjournment

The meeting was adjourned at 9:01 pm.

FPAC Agenda
April 3, 2018
Room 5050, Gatehouse Administration Center
7:00 – 9:00 pm

Meeting Opening/Announcements

Community Time

Opportunity for the public to address the Council.

Staff Announcements

Staff Presentation/Discussion

Dr. Francisco Duran, Chief Academic and Equity Officer.

Approval of Meeting Minutes

Old Business

Facebook presence.
Response to Rolling Valley ES parents.
Sub-committee reports.

New Business

FPAC Annual Report to School Board timeline.

Member Time

Adjournment

Note: The officers will hold a coordination meeting, prior to the full session, from 6:30-7:00 pm in room 3415.
Open to all.

MINUTES

Facilities Planning Advisory Council (FPAC)

Regular Meeting
2017-18 School Year

April 3, 2018

The meeting convened at 7:09 pm in Room 5050 of the Gatehouse Administration Center.
The following FPAC members attended:

Charles Hookey	<i>Braddock/Secretary</i>	Kristen Hyatt	<i>Sully</i>
Jay Reddy	<i>Dranesville</i>	Melina Duggal	<i>At Large</i>
Howard Perlstein	<i>Hunter Mill</i>	Karen Hogan	<i>At Large/Chair</i>
Kate Howarth	<i>Providence</i>	Dave Phillips	<i>At Large</i>
Ian Kelly	<i>Springfield</i>		

FCPS Staff:

Kevin Sneed, *Special Projects Administrator for Facilities and Transportation Services*
Jessica Gillis, *Director for Facilities and Transportation Services*

Meeting Opening

Hogan announced that the evening's guest speaker, Dr. Francisco Duran, is not available. He has been rescheduled for the May 1 FPAC meeting.

Hogan announced that the second May meeting (May 15) would be used to finalize the FPAC Annual Report; that the Report would be signed at the June 5 meeting; and the Report would be presented at an evening Work Session of the School Board on Tuesday, June 26.

Hogan also reported that the application process for new FPAC members is now open to fill the Lee and Sully district seats being vacated by Chris Nuneviller and Kristen Hyatt respectively. Applications will be accepted through April. The CPDC and School Board will approve candidates by the end of July.

Community Time

No members of the public asked to speak.

Minutes

Minutes from the February 24, 2018 FPAC retreat and March 6, 2018 meeting were approved.

Staff Announcements

Sneed reported that staff is now working on the "Spring" pupil attendance projections, based on actual February 2018 attendance reporting. These projections are used to determine probable school staffing and related space needs, including adding trailers, for Fall 2018.

Sneed also reported that staff is finalizing a series of responses to the School Board, generated by "next steps" at various recent Work Sessions, including estimates of what a "true" 25-year renovation cycle would cost (on an annual basis).

Gillis reported on her efforts to survey "best practices" from comparable sized school systems regarding attendance boundary adjustment policies and procedures. She plans to report to the SB at one of its May Work Sessions, in advance of an effort to update FCPS policies and procedures regarding attendance boundary adjustments.

Sneed and Gillis spoke of a developing idea to temporarily move K-3 grades at Belle View ES to currently empty space at Bucknell ES during Belle View's upcoming renovation. Such a move would decrease

the renovation timeline at Belle View by many months. The Belle View site is particularly challenging in its capacity to accommodate renovation logistics.

Old Business

As a follow up to the boundary adjustment comments by Gillis, and referencing the ever-coming Comprehensive Facilities Plan, Hogan reiterated previous comments by Superintendent Brabrand of his goal to provide the community several years' lead time on major boundary changes, such as would result from adding a new high school. Hogan further stated that FPAC will work with FTS staff to formulate a new, more apolitical, attendance boundary adjustment policy (and related procedures), and develop revised boundaries as a result of the new high school over the next three years. In the ensuing discussion:

- The previously mentioned algorithm being developed by a Virginia Tech grad student will play a key role in such an effort.
- The need for a dynamic, flexible, fair, and transparent policy will be critical in accommodating an ever-growing student population in the FCPS facilities available.
- The anticipated new high school in the northwest area of the county (mid 2020s), along with several new elementary schools and planned capacity enhancements/renovations to other facilities will require significant attendance boundary adjustments.
- The current policies and procedures have proven to be “challenging” in their ability to satisfy the numerous stakeholders involved.

There was no further information presented on the FPAC/Facebook proposal.

The matter of formally responding to the Rolling Valley parents (present at the last two FPAC meetings) was tabled after further discussion among members. The many “sides” to this issue are being examined by those who can decide a resolution, which is clearly not FPAC.

New Business

Hogan led a discussion on how to compile and report to the SB in our Annual Report on the “charges” laid out for the year:

Long-range vision: Hyatt and Griffith, with Duggal

CIP expansion to show need: Perlstein

Energy and “green initiatives”: Aminoff

Analyze previous FPAC recommendations: Hogan and Hookey

plus

FPAC initiated outline of an Asset Management Plan: Kelly

Hogan suggested that drafts from above committees need to be circulated among FPAC members before the May 1 meeting.

Kelly suggested that a placeholder FPAC “work session” date be established on the third Tuesday of regular-meeting months to allow for committee meetings. It will be necessary to post an agenda one week prior to such meetings (if they’re needed), but at least the time and space will be defined. It also was suggested establishing the hour before each regular meeting as a mini “work session”. Hookey will contact Kathy Vasapoli for scheduling and follow up on both “work session” proposals with members.

Member Time

Adjournment

The meeting was adjourned at 8:45 pm.

FPAC Agenda
May 1, 2018
Room 5050, Gatehouse Administration Center
7:00 – 9:00 pm

Meeting Opening/Announcements

Community Time

Opportunity for the public to address the Council.

Staff Announcements

Approval of Meeting Minutes

Old Business

Sub-committee reports
Annual Report

New Business

Staff Presentation/Discussion beginning approximately 8 p.m.

Dr. Francisco Duran, Chief Academic and Equity Officer.

Member Time

Adjournment

Note: The officers will hold a coordination meeting, prior to the full session, from 6:30-7:00 pm in room 3415.
Open to all.

MINUTES

Facilities Planning Advisory Council (FPAC)

Regular Meeting
2017-18 School Year

May 1, 2018

The meeting convened at 7:04 pm in Room 5050 of the Gatehouse Administration Center.
The following FPAC members attended:

Charles Hookey	<i>Braddock/Secretary</i>	Ian Kelly	<i>Springfield</i>
Jay Reddy	<i>Dranesville</i>	Kristen Hyatt	<i>Sully</i>
Howard Perlstein	<i>Hunter Mill</i>	Karen Hogan	<i>At Large/Chair</i>
Dan Aminoff	<i>Mason/Vice Chair</i>	Dave Phillips	<i>At Large</i>
Scott Higgins	<i>Mt. Vernon</i>	Allen Griffith	<i>Fairfax City</i>
Kate Howarth	<i>Providence</i>		

FCPS Staff:

Kevin Sneed, *Special Projects Administrator for Facilities and Transportation Services*
Dr. Francisco Duran, *Chief Academic and Equity Officer*

Meeting Opening

Hogan and Griffith introduced Katie Hermann, who will be the new Fairfax City representative to FPAC, upon the retirement of Griffith after the current school year. Hogan announced that FPAC member Melina Duggal (At Large) also will be leaving FPAC before the end of 2018, citing additional professional obligations. Hogan announced that the evening's guest speaker, Dr. Duran, would join us later.

Community Time

No members of the public asked to speak.

Minutes

Minutes from the April 3, 2018 FPAC meeting were approved.

Staff Announcements

Sneed spoke of the increased bond limit for capital spending, outlining that FY 2020 will be the first budget reflecting the increase to \$180M, following, and assuming approval of, the 2019 bond referendum. In the longer-term budgeting, he is including an additional \$25M in bonding capacity every five years.

Sneed estimated that a new/revised renovation queue will be developed in the early 2020s, as the current queue should be completed by 2029.

Sneed spoke of the current thinking to return the Dunn Loring, Pimmit Hills, and Virginia Hills facilities to student use over the next ten years. He also estimated a proposed new western County high school would be opened by 2030.

Sneed reported that Jessica Gillis continues to work with the County on an improved proffer formula for developers.

Old Business

Hogan opened discussion regarding the FPAC Annual Report which will need to be (nearly) finalized at the next meeting (May 15) so it can be signed at the June 5 meeting, which should be brief. The presentation of the report to the School Board is scheduled for June 26.

Griffith reported on the "charge" he and his committee are working on (Developing the long-range vision for FCPS school facilities, to be included in the Facilities Comprehensive Plan). With the need for more

feedback from Instructional Services and further investigation into (every) facility compliance to the Ed Specs, it may be prudent to issue an “incomplete” on this matter and continue this effort over the next school year. Griffith’s committee will emphasize in this year’s progress report the need to have facilities reflect new/developing 21st Century learning parameters. Higgins offered to share an electronic link he found to Montgomery County’s effort in this regard.

Perlstein reported on the “charge” he and his committee are working on (Developing a CIP that reflects the capacity and major maintenance requirements of FCPS and demonstrates the impact of the current bond funding limits). He spoke of their efforts to report on having the CIP include facility “needs”, and not just a spending plan for previously identified (and approved) renovations with allotted funds. A quantification of major maintenance needs, along with funding options/requirements should also be part of the CIP. The CIP could/should also include a section on “stated goals” (e.g. eliminating attendance islands) and how to achieve them (time and money estimates).

There was discussion of where more/better/new “safety and security” concerns fit into “21st Century” school planning and facilities. The idea of a separate one-time bond initiative as a way to fund this effort was floated.

Hookey reported that he and Hogan met with Sneed regarding the “charge” of reviewing past FPAC recommendations and he has submitted a summary for the Annual Report.

Hogan asked that she receive all submissions to the Annual Report ASAP. Perlstein will assist in reviewing a compiled document.

New Business

There was no new business.

Guest Speaker

Dr. Duran joined the meeting and spoke to the question of what the instructional “side of the house” was seeing in (new/changing) teaching and learning concepts, particularly as they impact facilities needs.

He said that Early Childhood Space (pre-K) was a focus and that the possibility of “community school” facilities, particularly for the early grades, was being studied by FCPS. He noted that Montgomery County is a pioneer in this concept and was being looked at as a “best practices” example. The idea of providing physical and mental health & wellness services, along with early education, in a “one-stop” facility appears to be gaining traction nationwide.

Duran said there is a “general thinking” that a move away from the “traditional” learning experience may be necessary in order to provide the vast array of learners the “right” type of education. The FCPS high school ‘Pathways’ program is one example, as well as further development of CTE (Career and Technical Education), with emphasis on such things as cyber and health-related fields.

He said that Fairfax County is “on board” with developing joint-service facilities, involved in current discussions, and looking at joint funding of such. He described the mission, membership and opportunity provided by the County-sponsored SCYPT (Successful Children and Youth Policy Team), which includes representatives from a variety of County Offices and FCPS.

Duran noted that the current Academy programs in FCPS are successful, but that facilities needs and economies of scale (student participation) make it impossible to offer all of these opportunities at all of our schools. Transportation to a specific Academy for students seeking a program not offered at their base school is a challenge. The idea of offering some sort of CTE at the middle school level is also being studied. Currently there are some after-school opportunities. A pilot project in the Chantilly pyramid, which provides an electronic “tablet” to all students (FCPS ‘ON’) will allow examination of some new virtual learning techniques and experiences. He said it’s estimated at least 25% of FCPS households do not have technology (excluding cell phones). Internet connectivity is also a challenge in many households.

He spoke of new ways of classroom instruction focused on project-based learning, flexible furniture, and overall larger space needs. (Phillips noted the use of “demountable” walls at US government facilities offers flexibility and sound privacy not previously available with “accordion” walls and partitions.)

Duran noted the concept of “play” as a (critical) experience offering “collaborative” learning is (again) being recognized and (re)developed as part of the school day’s curriculum.

He noted that some (mostly younger) teachers embrace all of this aforementioned 'change' while others are a little slower to get on board, as expected. There are efforts in FCPS to introduce change using "pilot" programs with faculty volunteers. Introducing and understanding all the new and varied resources available to both teachers and students is a big job. He mentioned the "flipped classroom" approach is being studied. "A flipped classroom is an instructional strategy and a type of blended learning that reverses the traditional learning environment by delivering instructional content, often online, outside of the classroom. It moves activities, including those that may have traditionally been considered homework, into the classroom." (flippedlearning.org)

In response to whether year-round schooling in FCPS was on the horizon he said it was not. He also volunteered that he (and others) are seeing a huge regression in the ability to write cohesive and complete thoughts in grammatically correct sentences and paragraphs. The use of abbreviated text and 'bullet points as essays' is becoming more and more acceptable. His observation is that teachers are divided on how or whether to react to this societal change.

Member Time

There was no request for Member time.

Adjournment

The meeting was adjourned at 9:25 pm.

FPAC Agenda
May 15, 2018
Room 5050, Gatehouse Administration Center
7:00 – 9:00 pm

Meeting Opening/Announcements

Community Time

Opportunity for the public to address the Council.

Staff Announcements

Approval of Meeting Minutes

Old Business

Annual Report Consideration and Review

New Business

Member Time

Adjournment

Note: The officers will hold a coordination meeting, prior to the full session, from 6:30-7:00 pm in room 3415.
Open to all.

MINUTES

Facilities Planning Advisory Council (FPAC)

Regular Meeting
2017-18 School Year

May 15, 2018

The meeting convened at 7:06 pm in Room 5050 of the Gatehouse Administration Center.
The following FPAC members attended:

Charles Hookey	<i>Braddock/Secretary</i>	Kristen Hyatt	<i>Sully</i>
Jay Reddy	<i>Dranesville</i>	Melina Duggal	<i>At Large</i>
Dan Aminoff	<i>Mason/Vice Chair</i>	Karen Hogan	<i>At Large/Chair</i>
Scott Higgins	<i>Mt. Vernon</i>	Dave Phillips	<i>At Large</i>
Kate Howarth	<i>Providence</i>	Allen Griffith	<i>Fairfax City</i>
Ian Kelly	<i>Springfield</i>		

Meeting Opening

Hogan and Griffith re-introduced Katie Hermann, who will be the new Fairfax City representative to FPAC, upon the retirement of Griffith after the current school year

Community Time

No members of the public asked to speak.

Minutes

Minutes from the May 1, 2018 FPAC meeting were approved.

Old Business

Hogan opened discussion regarding the FPAC Annual Report, a draft of which was distributed prior to the meeting.

There was discussion regarding how FPAC should comment on the Energy Saving Contract (ESCo) situation. The current FCPS agreement with Cenergistic expires next summer (2019). Kelly remarked that the state of Virginia has an ESCo, and that there are many providers of such services. There was discussion about competitive bidding for further services and the need to “learn” from not only the FCPS experience with Cenergistic, but also “best practices” from other users. It was noted that cost-effective “environmental stewardship” is a worthy FCPS goal.

There was further discussion, led by Higgins, Kelly, and Phillips (all with relevant work experience) regarding energy efficient buildings. There were references to both NIBS (National Institute of Building Sciences) and NIST (National Institute of Standards and Technology).

Hogan proposed a diagram for the Annual Report which would illustrate the current/challenging relationships among O&M, the CIP, an Annual Maintenance Plan, the proposed Comprehensive Facilities Plan, and a possible Comprehensive Capital Plan. There was extensive discussion on this including the need for equitable distribution of O&M money, an integrated approach to O&M and the CIP, and a comprehensive facility condition assessment. Money for a cursory review of the latter has been allocated and the report from same will inform Facilities' Comprehensive Investment Capital Plan (CICP).

Hogan, after requested input, will distribute a revised draft of the Annual Report prior to the June 5 FPAC meeting, when members will “sign” it.

New Business

There was no new business.

Member Time

There was no request for Member time.

Adjournment

The meeting was adjourned at 8:37 pm.

FPAC Agenda
June 5, 2018
Room 5050, Gatehouse Administration Center
7:00 – 9:00 pm

Meeting Opening/Announcements

Community Time

Opportunity for the public to address the Council.

Staff Announcements

Approval of Meeting Minutes

Old Business

Annual Report Approval and Signing

New Business

Member Time

Adjournment

Note: The officers will NOT hold a coordination meeting, prior to the full session.

MINUTES

Facilities Planning Advisory Council (FPAC)

Regular Meeting
2017-18 School Year

June 5, 2018

The meeting convened at 7:06 pm in Room 5050 of the Gatehouse Administration Center.
The following FPAC members attended:

Charles Hookey	<i>Braddock/Secretary</i>	Kristen Hyatt	<i>Sully</i>
Jay Reddy	<i>Dranesville</i>	Melina Duggal	<i>At Large</i>
Howard Perlstein	<i>Hunter Mill</i>	Karen Hogan	<i>At Large/Chair</i>
Dan Aminoff	<i>Mason/Vice Chair</i>	Dave Phillips	<i>At Large</i>
Kate Howarth	<i>Providence</i>	Allen Griffith	<i>Fairfax City</i>

Meeting Opening

Hogan opened the meeting and reported briefly on her attendance at the CPDC meeting of June 4. Among other business, the CPDC will receive and consider applications for vacancies on FPAC.

Aminoff reported briefly on his attendance at the Kaye Kory/Sandy Evans "town hall" he attended on June 4.

Community Time

No members of the public asked to speak.

Minutes

Minutes from the May 15, 2018 FPAC meeting were approved.

Old Business

The FPAC Annual Report to the School Board was approved and members eligible to "sign" it did so. All members are requested to attend the presentation of the report to the School Board on Tuesday, June 26, 2018. Tonight's meeting and the School Board presentation conclude FPAC's work for the school year.

New Business

There was no new business.

Member Time

Hogan recognized retiring FPAC members Duggal, Griffith, and Hyatt, and thanked them for their service to the Council. Griffith is an original (2010) FPAC appointee.

Adjournment

The meeting was adjourned at 7:50 pm.