

# Infrastructure Improvement Funding Programs for Virginia Public Schools

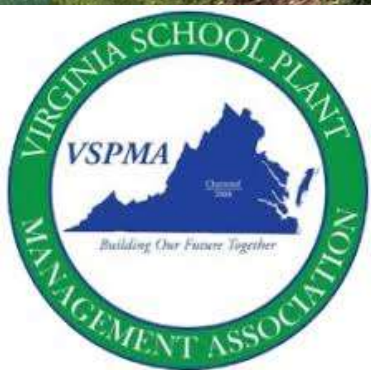
Presented by:

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- Matt Robeson, MAEd, Funding Specialist

June

12

2024



# Key Topics



The demands and challenges facing our clients



ABM assists public schools in creating guaranteed funding streams to advance their goals



Collaborative process reduces risk and improves project performance

# Public School Demands and Challenges



Deferred Spending on Capital Projects



Need for Updated Infrastructure



Difficulty with Bond Issues



Unfunded Mandates



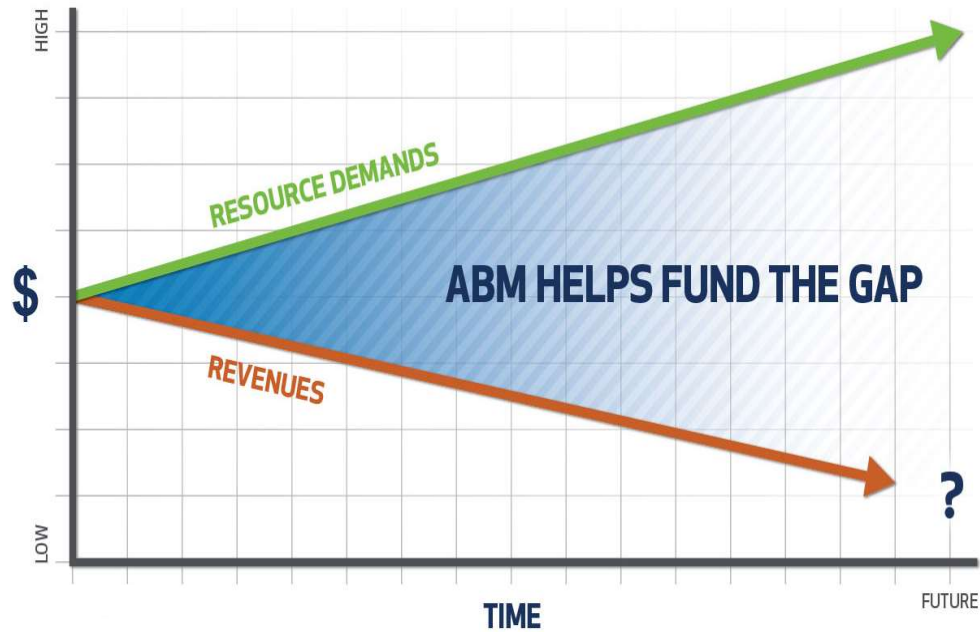
Equitable Classroom Spending



Engaged Students



# The New Normal



# Changing the Capital Paradigm



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## A Co-Authored Solution

ABM provides school districts with **valuable information** to make better decisions based on **real data** and its correlation to student achievement, resource allocation and finance.



## Identifying and Funding the Gaps

### Energy Conservation Measures (ECMs) & Infrastructure Improvements

- Building Automation Systems (BAS)
- Central Plant Optimization
- Retro Commissioning
- Demand Control Ventilation
- Energy Analytics
- VAV AHU Control
- Lab Fume Hood Retrofit
- Thermal Energy Storage System
- Building Envelope Enhancements
- Electrical Infrastructure
- Fleet Electrification and EV Charging Stations
- HVAC Mechanical
- Indoor Air Quality Improvements
- LED Lighting / Lighting Controls
- Steam System
- Plug Load Management
- Solar Panel Array (Roof, Carport or Ground)
- Water Conservation
- VFDs

ABM reviews **ALL** opportunities during full-scale project development





# Additional Infrastructure Solutions

Schools can take advantage of the following:

- Roofing
- STEM Learning Enhancements
- Fleet Electrification
- Turf Field Conversion
- Track Resurfacing
- Classroom & Bathroom Upgrades
- Playground Equipment



# Methodology & Preliminary Audit

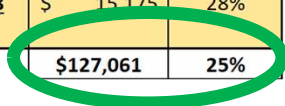
- Data Collection and Analysis
  - Utility Bills
  - Calculated Energy Use Index
  - Benchmark Against DOE/CBECS
- Site Visits and Interviews
- Feasibility Study Results
  - Preliminary List of Energy Conservation Measures (ECM)
  - Financial Potential: Self-Funded Solutions and CIP Projects
- Develop a co-authored solution to support your mission



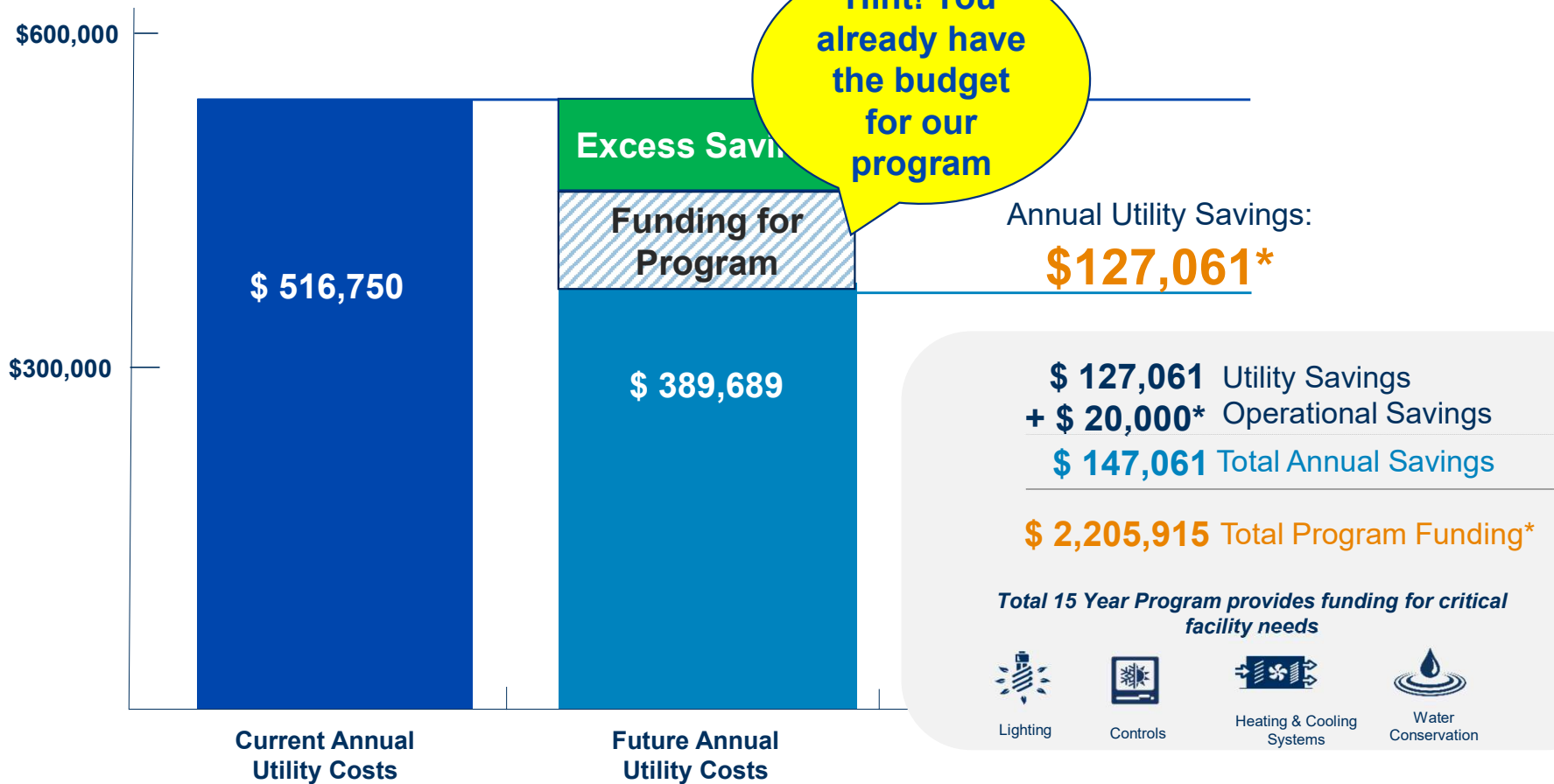


# Sample Utility Profile & Savings Summary

Property Name	Square Feet	Utility	Utility Cost (\$)						Electricity & Natural Gas				Savings	
			2018	2018 Total	\$/Sqft (2018)	2019	2019 Total	\$/Sqft (2019)	2018 kBTU	2018 EUI	2019 kBTU	2019 EUI	Potential \$ Savings	Potential % Savings
High School	222,902	Electric	\$ 160,485	\$207,831.00	\$ 0.93	\$ 159,977	\$215,278	\$ 0.97	11,296,053	<b>50.68</b>	12,767,233	<b>57.28</b>	\$ 62,431	29%
		NG	\$ 36,992			\$ 45,489								
		Water	\$ 10,353			\$ 10,712								
Middle School	190,478	Electric	\$ 185,452	\$225,429.00	\$ 1.18	\$ 186,252	\$247,275	\$ 1.30	10,606,373	<b>55.68</b>	15,078,068	<b>79.16</b>	\$ 49,455	20%
		NG	\$ 29,624			\$ 50,311								
		Water	\$ 10,353			\$ 10,712								
Elementary School	40,363	Electric	\$ 29,840	\$50,329.00	\$ 1.25	\$ 34,112	\$54,197	\$ 1.34	2,526,912	<b>62.60</b>	2,610,684	<b>64.68</b>	\$ 15,175	28%
		NG	\$ 10,136			\$ 9,373								
		Water	\$ 10,353			\$ 10,712								
						<b>\$516,750</b>					<b>30,455,985</b>		<b>\$127,061</b>	<b>25%</b>



# Sample - Funding Using Your Existing Budget



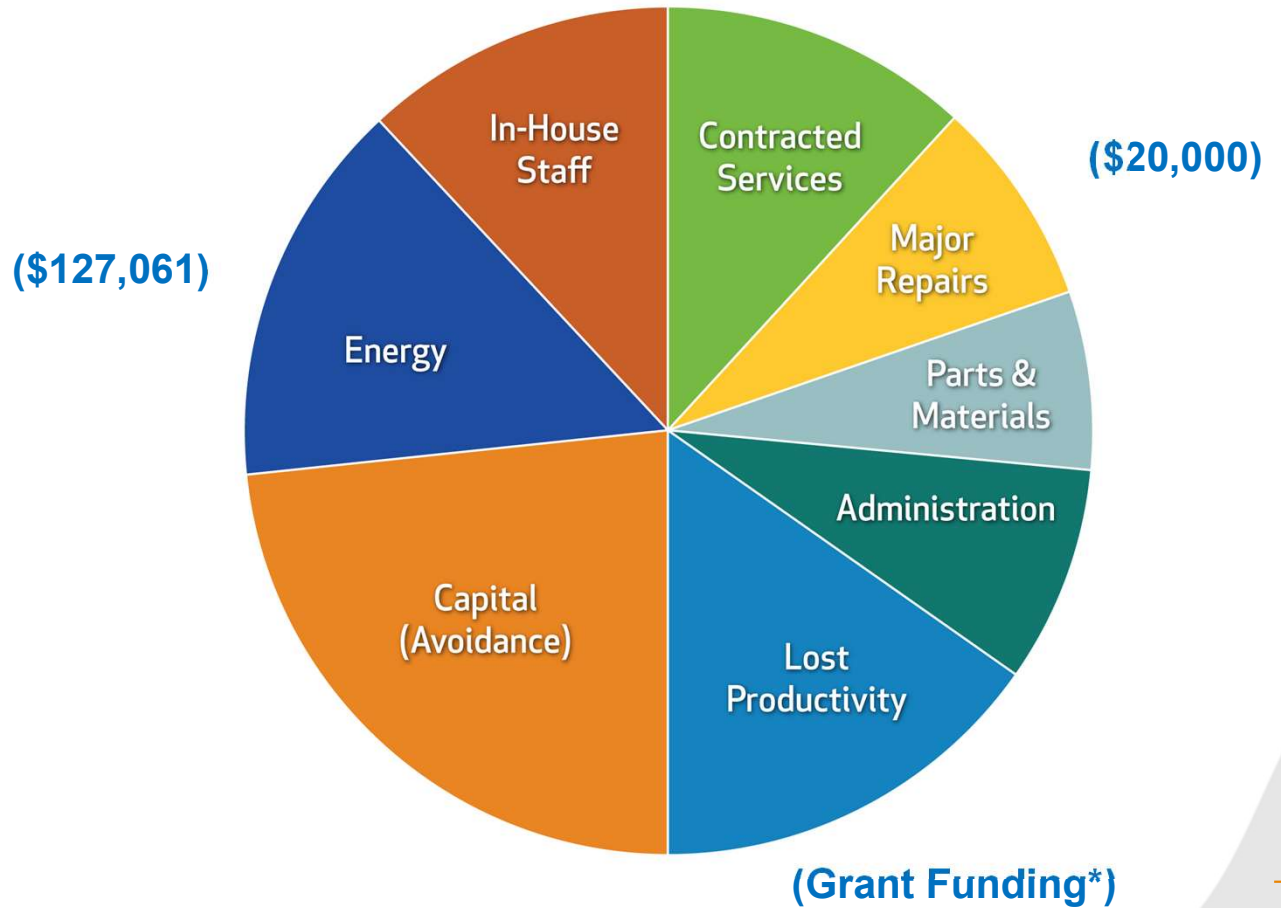
\*Sample Savings

# Funding the Solution

## FUNDING

Solutions are funded through existing operating budget

**\$147,061 Annually  
x 15 yr. term  
= \$2.2M**





# Capital Volatility Analysis (EXAMPLE) 15-Yr Capital Planning Tool

Facility	Identification	Grade	Manufacturer	Model	Serial	Install Date	Tons / HP / BTU's	Remaining Useful Life/yrs
High School (Café ceiling side rm)	FCU-4	D	Trane	DNR	DNR	2000	3.5	2
High School (Café)	Cond-4	D	Trane	TTB042C100A1	R032NUXBF	2000	3.5	2
High School (Café hall)	AHU-1	F	DNR	(heat only, failed)	DNR	2000	7.5	0
High School (Café hall)	AHU-2	F	DNR	(heat only, failed)	DNR	2000	7.5	0
High School (Café)	KEF (qty 7)	F	CentriMaster	PNU135RG, 0.75hp	TYE590407	2000	7	0
High School (Café)	KSF (qty 3)	D	MasterVent	AFSN126K2, 1.5hp	TYE59012	2000	3	2
High School (Auditorium)	AHU-9	C	Trane	DNR	R038948	2000	15	5
High School (Auditorium)	Cond-9	D	Trane	TTA180B300CC	P4312JEAH	1999	15	2
High School (Auditorium)	AHU-10	C	Trane	DNR	R01938503	2000	15	7
High School (Auditorium)	Cond-10	D	Trane	TTA180B300CC	P4312JEAH	1999	15	2
High School (Auditorium)	AHU-7	C	Trane	MCCA017, 8500 cfm / 5hp	K00B30270	2000	40	6

Assets				
Average Grade	Qty	%	Present \$ Value	% Dollar Value
A	0	0.0%	\$ -	0.0%
B	61	33.0%	\$ 6,277,732	15.8%
C	66	35.7%	\$ 20,621,217	52.0%
D	50	27.0%	\$ 7,550,965	19.0%
F	8	4.3%	\$ 5,240,600	13.2%
<b>TOTAL</b>	<b>185</b>		<b>\$ 39,690,514</b>	

Capital Exposure over Term		
Yrs 0-5	Yrs 6-10	Yrs 11-15
<b>\$13,302,677</b>	<b>\$14,626,311</b>	<b>\$ 11,761,526</b>

# ABM Program Benefits

## Improve your Learning Environment and Learning Experience



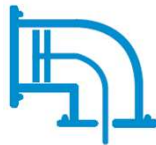
- Meet **CRITICAL** facility needs



- **Without** increasing taxpayer burden



- Create energy & operational savings to fund upgrade facilities



- Becomes a long-term partner with you for financial assistance, capital improvement planning, and guaranteed savings

# Energy & Operational Savings Program

## Why?

- Meet CRITICAL facility needs
- Offset rising energy costs
- Requires no upfront capital, Fund through reduced utility, operating costs, and revenue enhancements
- Can leverage Grants, Rebates, and other Incentives
- Without increasing taxpayer burden
- Preferred Equipment & Sub-contractor input
- Single contract that covers the entire scope of work at all included facilities
- Project Performance Guarantee
- Co-Authored Process with Dedicated Local Team of Facility and Funding Specialists
- Results MUST be guaranteed & reported
- Fixed Fee Contract, No Change Orders...Unless Customer Initiated
- Alternative Funding Options provide Attractive Repayment Structure
  - Debt Consolidation
  - Professional Services Agreement



# Why ABM?

- Facility Solutions Experts
- Dedicated Local Team
- Community and Student Engagement
- Financial Acumen
  - CIP planning tool
  - Grants / rebates / incentives
- Co-Authored Process
- Expedited Delivery – Fast Track Process
- Single Point of Accountability
- Proven Track Record of Demonstrated Success



# K-12 Schools and Local Governments Benefit From Financial & Technical Solutions



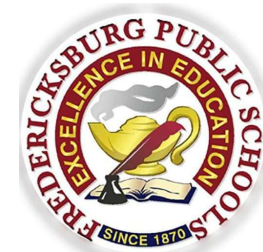
ORANGE COUNTY  
PUBLIC SCHOOLS  
(PHASE 1,2,3)  
Orange, VA



FAUQUIER COUNTY  
PUBLIC SCHOOLS  
Warrenton, VA



CHARLES CITY COUNTY  
PUBLIC SCHOOLS  
Charles City County, VA



FREDERICKSBURG CITY  
AND CITY SCHOOLS  
Fredericksburg, VA



CITY OF EMPORIA  
Emporia, VA



NORTHAMPTON COUNTY  
And PUBLIC SCHOOLS  
Northampton, VA



BRUNSWICK COUNTY  
SCHOOLS  
Lawrenceville, VA



# ABM at a Glance



Founded in 1909 | \$8 billion in revenue



250+ US and international locations



20,000+ clients | 100,000+ employees



**FACILITIES  
ENGINEERING**  
10,000+  
certified engineers



**MICROGRID**  
Over **1GW**  
of installed microgrids



**JANITORIAL**  
**4+ billion** sq. ft.  
daily



**HVAC &  
MECHANICAL**  
**500,000+** heating  
and cooling systems  
maintained



**MISSION  
CRITICAL**  
**35+ million** sq. ft.  
data center spaces  
maintained



**PARKING &  
TRANSPORTATION**  
**\$2+ billion**  
parking revenue  
collected



**ELECTRICAL**  
**ranked #1 in**  
EV charge port  
installation in the U.S.



**ENERGY**  
**30%** average energy  
use reduction



**LANDSCAPE  
& TURF**  
**55,000+** acres  
maintained

**Market-leading provider of comprehensive facility services with best-in-class presence and client relationships**

Unparalleled reach | Diverse portfolio | Trusted reputation



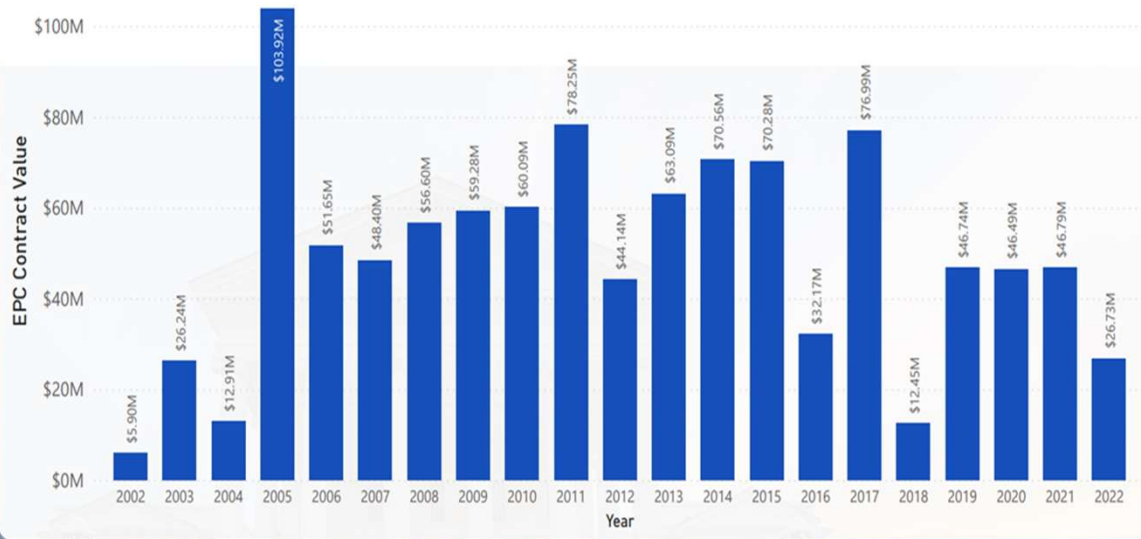
# Solution Timeline



# Virginia's ESPC Program

Program Established in 2002

Commonwealth of Virginia ESPC Contracts by Year



Over 280 Projects

Over \$1B in Project Investment



**Energy Savings Performance Contracting**  
3 year Project History

**2020**

Total Contract Amount: **\$46.4M**

Projects:

- VDOT
- VA Beach Public Schools
- Prince William County Schools
- New River Valley Regional Jail
- Essex County
- Loudoun County Schools
- City of Emporia
- Bedford Regional Water Authority

**2021**

Total Contracts Amount: **\$42.9M**

Projects:

- VA Beach City Schools
- Charles City County Schools
- City of Virginia Beach
- Loudoun County Schools Phase II
- Pittsylvania County Schools Phase III
- Virginia Museum of Natural History
- Shenandoah County Schools
- Fairfax County

**2022**

Total Contracts Amount: **\$25.9M**

Projects:

- Northampton County Schools
- Northampton County
- Loudoun County Schools Phase III
- Fredericksburg City Schools
- Virginia Distribution Center

