

# District Facility Discussion Summary

Portions of presentations

Conceptual Estimated Cost &  
Maintenance Cost

BOE & Public

February 2015 thru October 2016

# Construction Costing- what's changing?

- Local General Contractors
- Local Subcontractors
- Suppliers had fewer owners buying products
- Quantity of Bidders creates competition
- Competition drives down bid cost

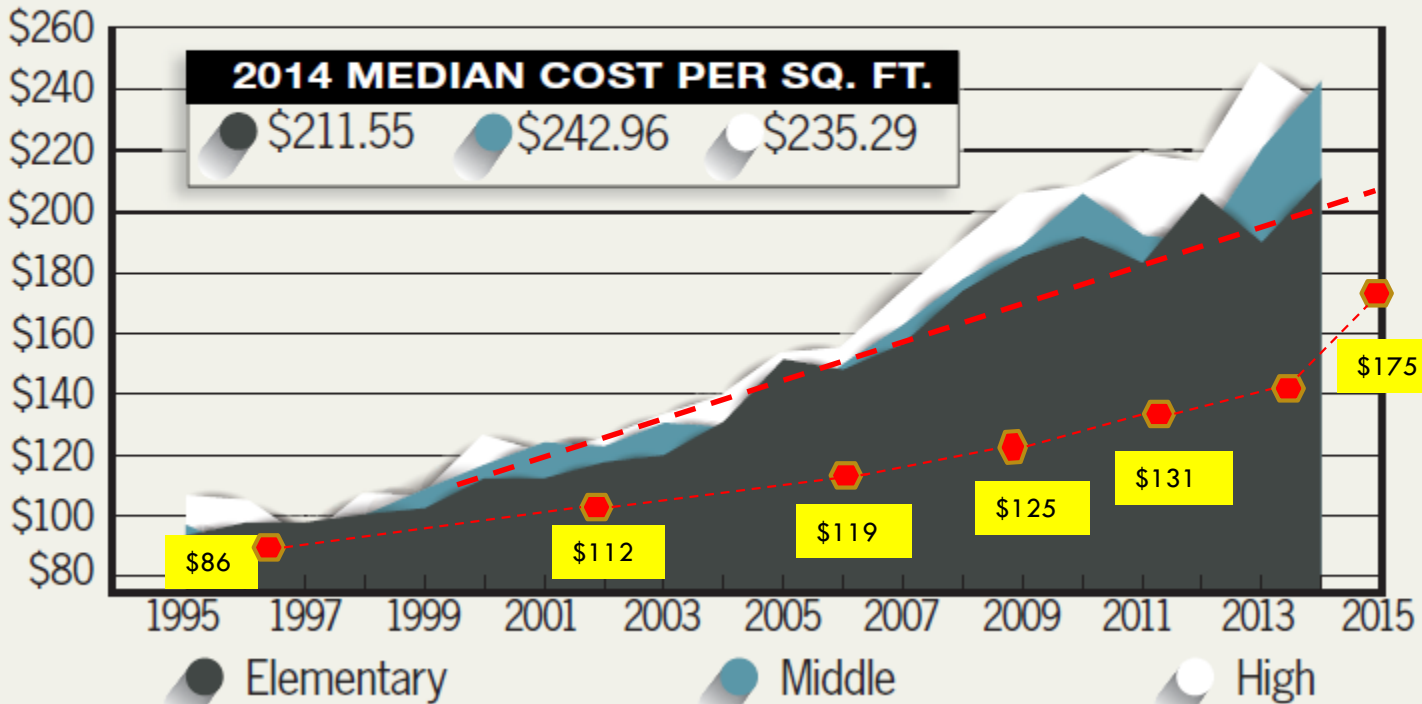
# Construction costs from 1995 thru 2014

## WSFCS cost history

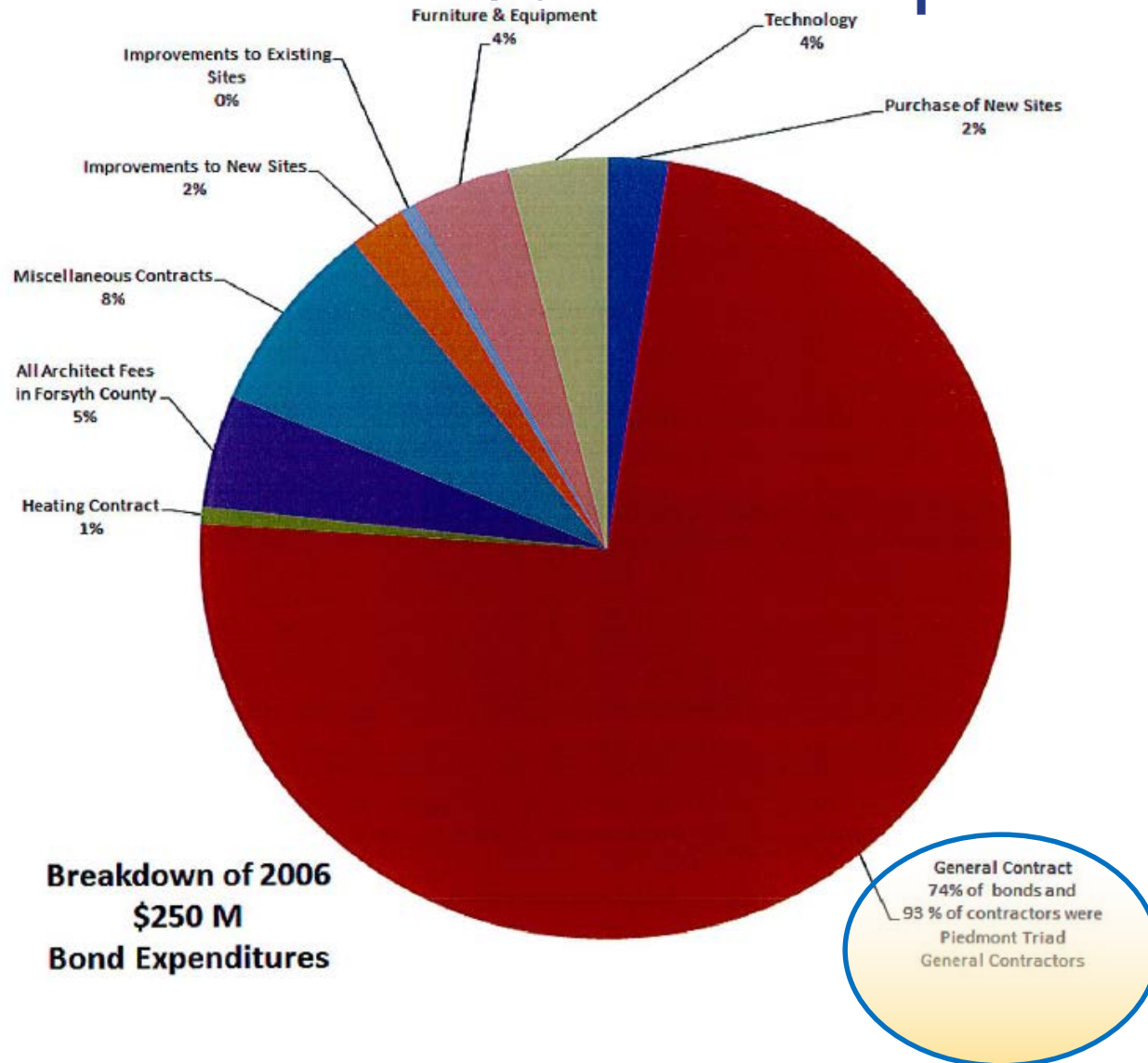
----- \$ sq. ft.



**GRAPH A: MEDIAN COST PER SQ. FT., 1995-2014**



# Cost History 74% Bricks & Mortar 26 % other expenses



# Conceptual Cost Estimate (CCE)

- A conceptual Estimate is also known as a top-down, order of magnitude, feasibility, or preliminary estimate.
- It is the first serious effort to predict the cost of the project.
- It is usually made without detailed design and engineering data.
- At the beginning of a project, the owner, prior to any design, with limited information must know the approximate value in order to evaluate the economic feasibility of proceeding with the project.

# Conceptual Estimate for 17 schools between 50 and 60 years old

	Feb 21 <sup>st</sup> 2015 retreat Cost Estimates \$140 sf	October 2015 Recent 30% inflation \$175 sf
□ 4 New Schools	\$ 71,618,400	\$ 89,523,000
□ 9 Replacement Schools	\$115,169,167	\$ 144,824,933
□ 4 Partial Replacements	\$ 67,096,304	\$ 80,284,380
□ 7 Renovations	\$ 70,817,657	\$ 92,062,889
□ District Wide Projects	<u>\$134,580,000</u>	<u>\$ 168,204,000</u>
□ District Needs Between	\$390 M and \$460 M	\$ 574,899,202



# How construction cost variables were handled in the past

- Base estimated cost were listed
- Base pricing plus an agreed inflation increase were also identified on the bond handout
- The voters voted on the cost that included the agreed inflationary percentage estimate

Previously 8% first two years and 4% per year thereafter

- Handout of previous formatting for review

- Current Construction cost is estimated \$175 sf

Inflation estimates approximately 2% per year compounded

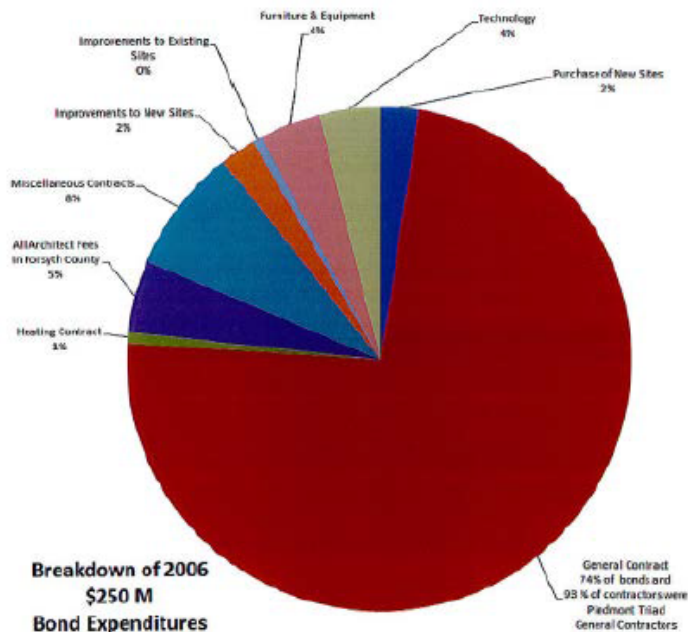


## Other building program costs –

After the base school project Conceptual Cost Estimate is established, include other costs associated with a School project, including, but not limited to; soil testing, geotechnical engineering, architectural/engineering design fees, surveying, site improvements, utilities-on and offsite, furniture, technology, permits, and other miscellaneous costs. These ancillary costs averaging 26% have been developed from WS/FCS and state cost histories.

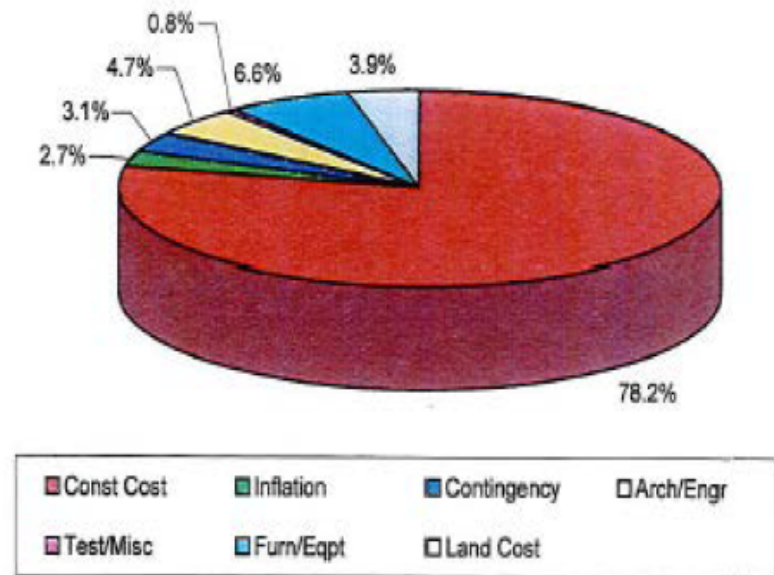
### Winston Salem Forsyth County Total Project Cost

Breakdown of costs in 2006 Bonds



### North Carolina Total Project Cost

Project Cost

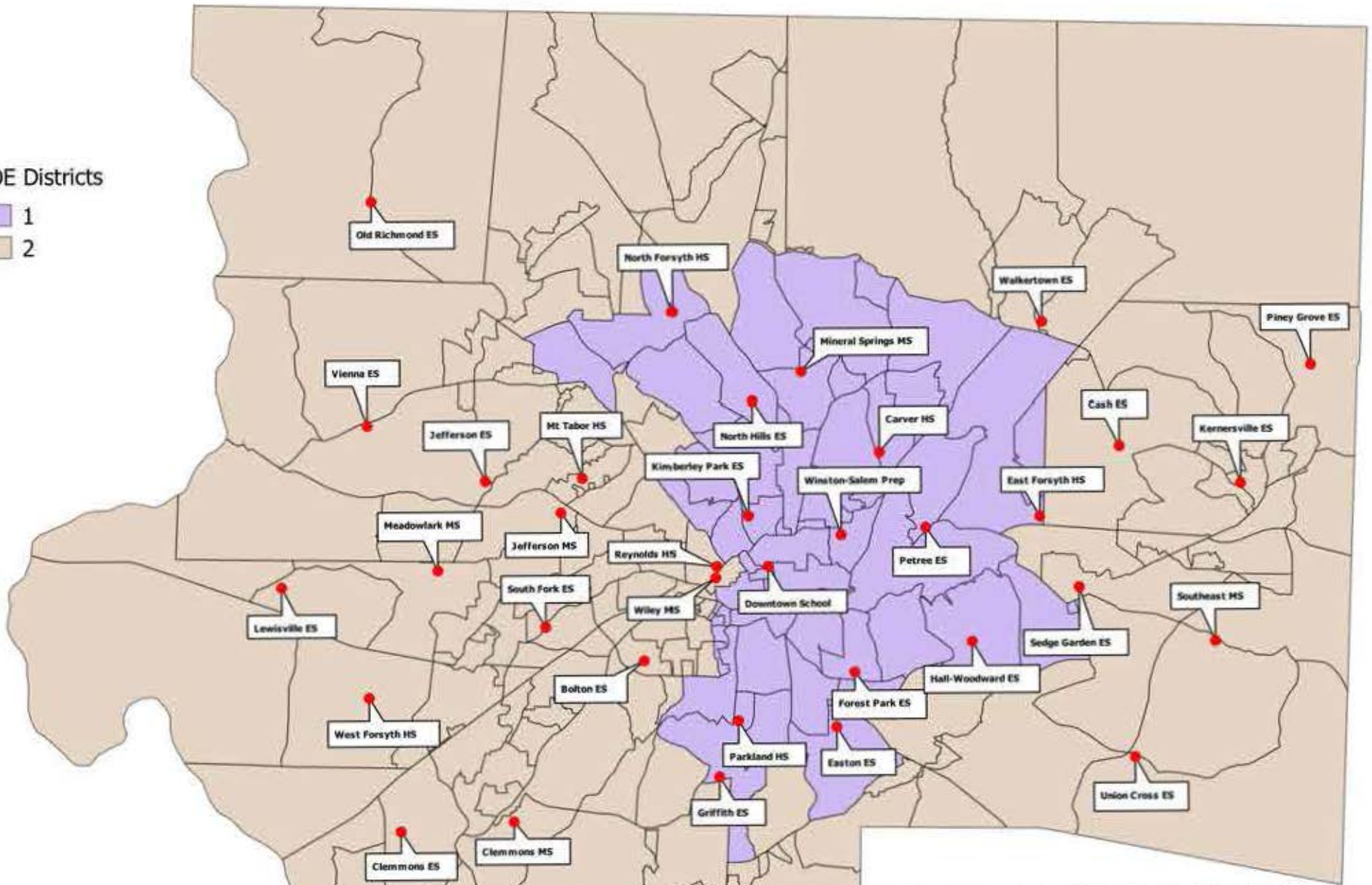


# Maintaining Existing Buildings

\$29.4 M in 35 Schools

BOE Districts

- 1
- 2



**WS/FCS 10 Year Plan Capital Projects**

# Basis of the Lifecycle Replacement and Yearly Capitol Funding

Average 1 year School Lifecycle Replacement Needs					
Types of Equipment	Number of Buildings/Equip	Lifecycle Replacement	Budget per Year	Number of Schools per year	
Roofs	8,000,000	20	400,000	4	Based on 100,000 sq.ft. per school
Generators	44	20	2	2	
Main Elect Panels	93	30	3	3	
Windows and Doors	93	30	3	3	
Parking Lots	186	15	12	6	Based on 2 per school
Tennis Courts	10	15	1	1	
High School Tracks	11	10	1	1	
Boilers	272	20	14	7	Based on 2 per school
Control Systems	71	15	5	5	
Chillers	64	20	3	3	
Cooling Towers	41	15	3	3	
Heat Pumps	1,334	15	89	2	Based on 45 per site
AHU's, Unit Vent, and other air moving equipment	3,984	20	199	3	Based on 60 per school
RTU's	136	20	7	2	Based on 3 per school
ERV's	148	20	7	1.5	Based on 4 per school
Bathroom Fixtures	8,400	20	420	1	Based on 11 fixtures per group restroom
Averaging \$8-9 M per year from 2010 to 2020 without cost inflationary factors					

2/8/2016

## 10 Year Plan Capital Projects for 29.4 Million

School	PROJECT	Cost Estimate
Bolton	Renovate restrooms for ADA , 1966 Building	\$ 150,000
Carver	Replace gym HVAC	\$ 450,000
Carver	Install Gym HVAC Ventilation Unit (ERV)	\$ 500,000
Cash	Replace Roofs	\$ 800,000
Clemmons E	Replace Electric Boiler and Pumps	\$ 150,000
Clemmons M	Replace Ventilation Air/HVAC Unit (ERV)	\$ 500,000
Downtown School	Replace Roof on 1992 Classroom Bldg.	\$ 240,000
East High*	Replace A/C and Heat in 1000 Building	\$ 225,000
East High*	Install Gym HVAC Ventilation Unit (ERV on 900 bldg.)	\$ 500,000
Easton*	Replace Kindergarten Bldg. Roof	\$ 110,000
Forest Park	Replace Roof	\$ 970,000
Forest Park	Replace Boiler, Heat Pump's, HVAC Controls, Install energy efficient ERV's	\$ 1,025,000
Forest Park	Replace Generator	\$ 160,000
Griffith E.*	Replace Roofs on 1967 and 1976 Buildings	\$ 870,000
Hall Woodard	Renovate restrooms for ADA	\$ 210,000
Jefferson E	Replace Generator	\$ 160,000
Jefferson M.	Replace original AHU / HVAC Control System	\$ 950,000
Jefferson M.	Replace 2/Boilers, Pumps, Dom. Hot Water-Heater & Tank	\$ 280,000
Jefferson M.	Upgrade Lighting in 1968 Building	\$ 300,000
Jefferson M.	Renovate restrooms for ADA, 1968 Building	\$ 75,000
Kernersville E	Replace Electrical Panels in 1950s Bldg.	\$ 70,000
Kernersville E	Replace Mechanical System /HVAC Controls, 1950s Bldg.	\$ 750,000
Kernersville E	Replace Generator	\$ 150,000
Kernersville E	Kitchen Renovation	\$ 550,000
Kernersville E	Replace Boilers / Dom Hot Water	\$ 280,000
Kernersville E	Ceilings and Lighting Upgrade	\$ 275,000
Kimberly Park	Lighting Upgrade Main Building & Aud.	\$ 250,000
Lewisville	Replace Roof on Front Bldg., Gym and Auditorium	\$ 240,000
Lewisville	Replace Windows, Doors and Floors at Lewisville	\$ 1,610,000
Lewisville	Replace Ceilings and Lights	\$ 650,000
Lewisville	Replace HVAC systems and HVAC Controls	\$ 1,590,000
Meadowlark M.	Replace Lighting in Gym	\$ 40,000
Mineral Springs	Replace gym HVAC	\$ 200,000
Mt Tabor	Kitchen and Grease Trap Renovation	\$ 700,000
North High*	Upgrade Exterior Lighting	\$ 45,000
North High*	Install Gym HVAC Ventilation Unit (ERV)	\$ 500,000

2/8/2016

## 10 Year Plan Capital Projects for 29.4 Million

School	PROJECT	Cost Estimate
North Hills	Replace Emergency Communications System	\$ 90,000
Old Richmond	Replace Electrical Service in Kitchen/ upgrade lighting	\$ 125,000
Parkland	Restroom Renovation to ADA, 1965 building	\$ 70,000
Parkland	Install Gym HVAC Ventilation Unit (ERV)	\$ 500,000
Parkland	Replace Chiller & Cooling Tower	\$ 300,000
Parkland	Replace main electrical service in 1965 Building	\$ 250,000
Parkland	Kitchen Renovation, inc electrical	\$ 750,000
Petree	Replace Generator	\$ 160,000
Piney Grove	Replace Heat Pumps	\$ 350,000
Piney Grove	Replace Generator	\$ 120,000
Piney Grove	Replace Water Heaters	\$ 120,000
Piney Grove	Replace Emergency Communications System	\$ 90,000
Piney Grove	Replace Roof	\$ 1,090,000
Reynolds	Replace generator	\$ 160,000
Sedge Garden	Replace Roof 1978 Building	\$ 800,000
Southeast M.	Replace Gym Lighting	\$ 40,000
South Fork	Upgrade Lighting in Main Building	\$ 200,000
Union Cross	Replace Dom Water Heater	\$ 100,000
Union Cross	Replace Roof	\$ 1,050,000
Vienna	Replace Gym Roof	\$ 200,000
Walkertown E	Replace Generator	\$ 120,000
Walkertown E	Replace Roofs	\$ 1,080,000
Walkertown E	Replace Boiler, Heat Pumps and ERV	\$ 850,000
Walkertown E	Improve Student Pickup / Drop-Off	\$ 950,000
Walkertown E	Replace HVAC Control System	\$ 200,000
West	Install Gym HVAC Ventilation Unit (ERV in 800 bldg.)	\$ 500,000
West	Replace A/C and heat in 900 building	\$ 300,000
West	Kitchen Renovation	\$ 700,000
Wiley	Replace HVAC Control system	\$ 350,000
Wiley	Replace Generator	\$ 160,000
W/S prep	Kitchen/Café bldg. Install Roof Top and dinning AHU	\$ 300,000
W/S prep	Kitchen Renovation, inc lighting and electrical	\$ 675,000
W/S prep	Replace Dom Hot Water an Storage Tank	\$ 125,000
	<b>Total</b>	<b>\$ 29,400,000</b>
	*Project not included in 2016 Bond	
	All lighting upgrades will boost light levels to state standards and meet current energy efficiency guidelines	
	All Controls will be replaced with energy efficient models	
	All HVAC, boilers & units will be replaced with energy efficient models	



Building & Grounds *May - Oct* , 2015

Cost Estimates?

Costs are changing