



Facilities Update School Board Briefing

March 24, 2020

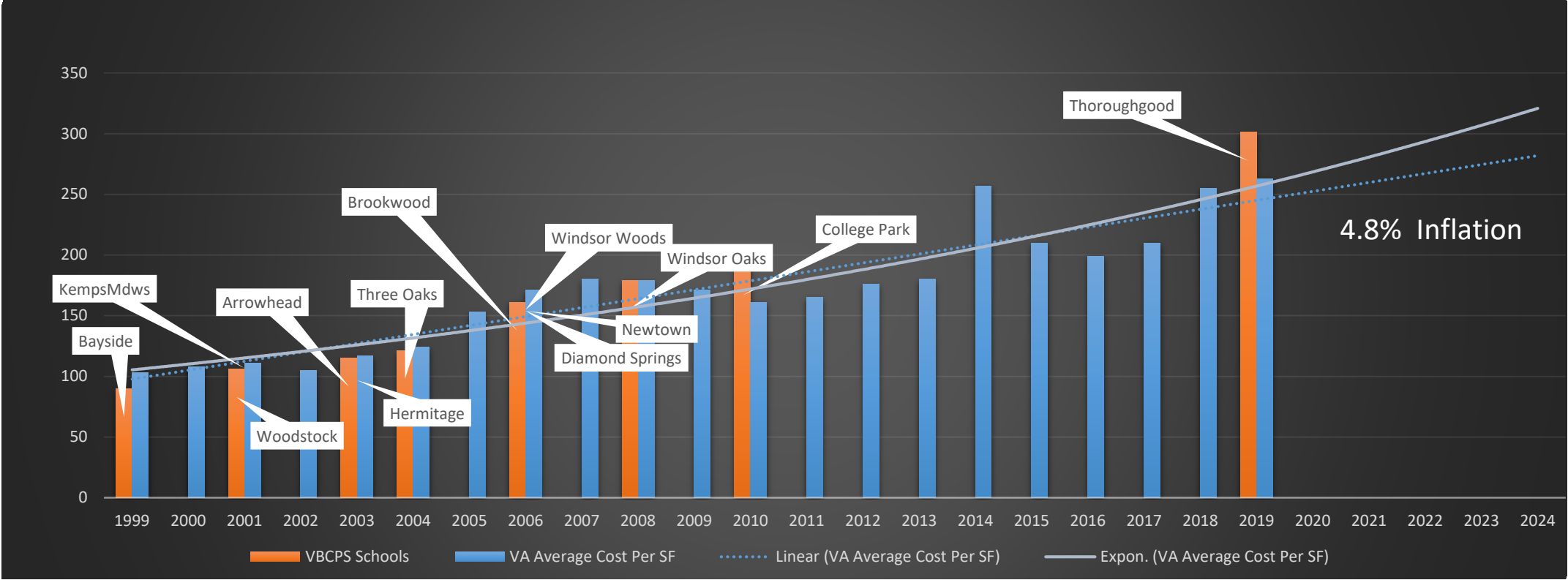
*School Division Services
Office of Facilities/Maintenance Services*

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- School Construction Costs – Historical Perspective
 - Programming/Design Process – Prototype Designs
 - Return on Investment (ROI)
 - Long Range CIP Needs
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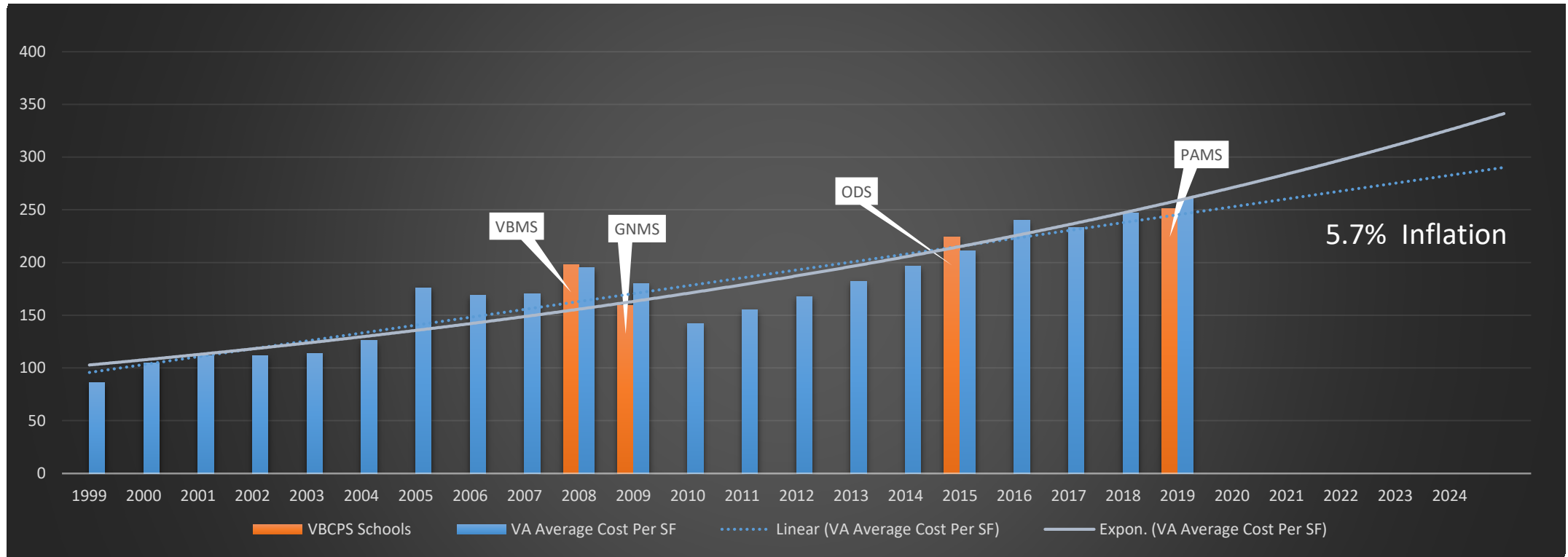
School Construction Costs Historical Perspective



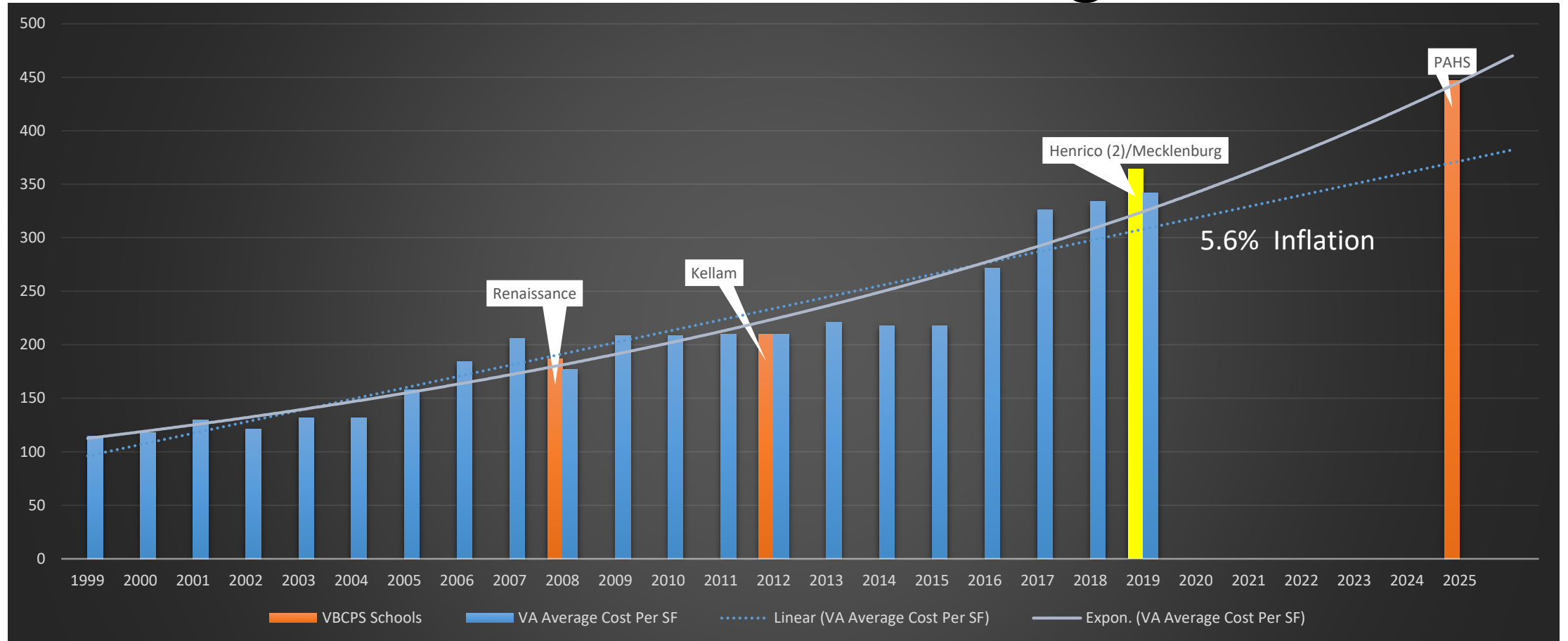
Elementary School Cost/SF Commonwealth of Virginia



Middle School Cost/SF Commonwealth of Virginia



High School Cost/SF Commonwealth of Virginia



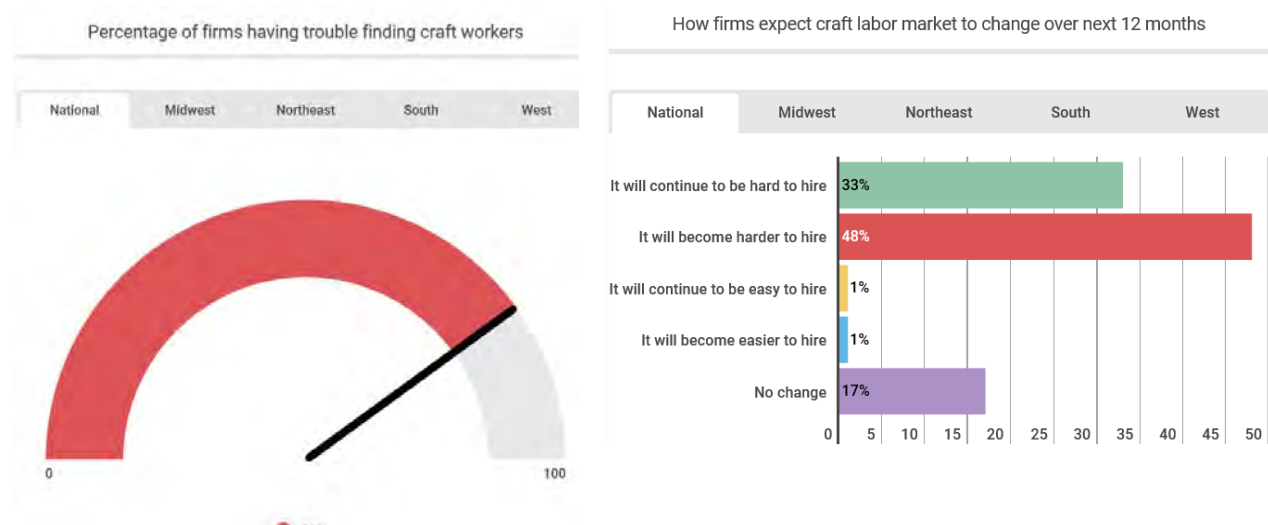
Market Forces

- Shrinking Labor Pool
- Uncertainty – Tariffs
- Large Volume of Work
- Average Construction Inflation in VA over 20 years 5.4%

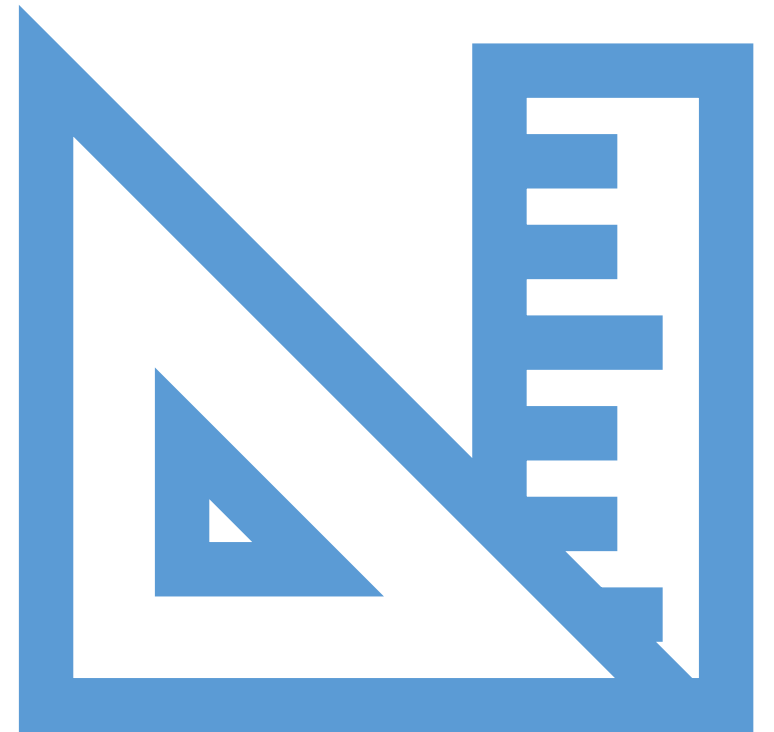


Eighty Percent of Contractors Report Difficulty Finding Qualified Craft Workers to Hire as Association Calls for Measures to Rebuild Workforce

August 29, 2018



Programming/Design Process Prototype Designs





Programming Design Charrettes Stakeholder Input

Design Charrettes – Last 15 Years

- Renaissance Academy
- Virginia Beach Middle School
- Windsor Oaks Elementary School
- Great Neck Middle School
- College Park Elementary School
- Kellam High School
- Old Donation School
- John B. Dey Elementary School
- Thoroughgood Elementary School
- Princess Anne Middle School
- Brock Center – Environmental Studies



Prototypes

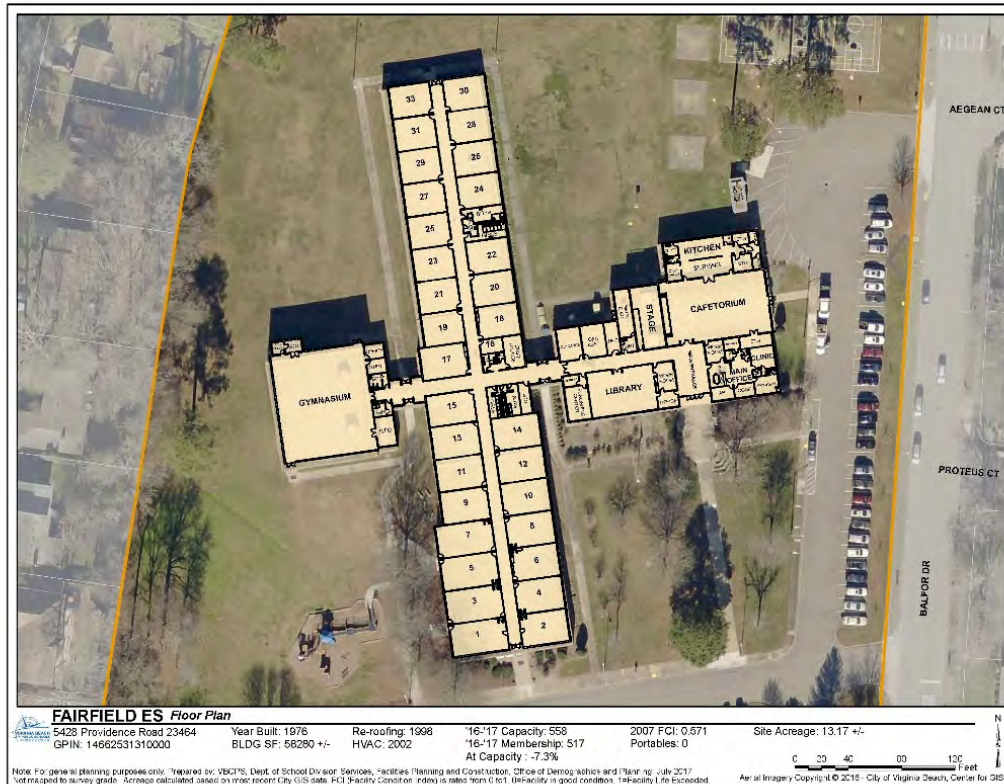
Prototypical Plans

- Time
- Multiple Projects

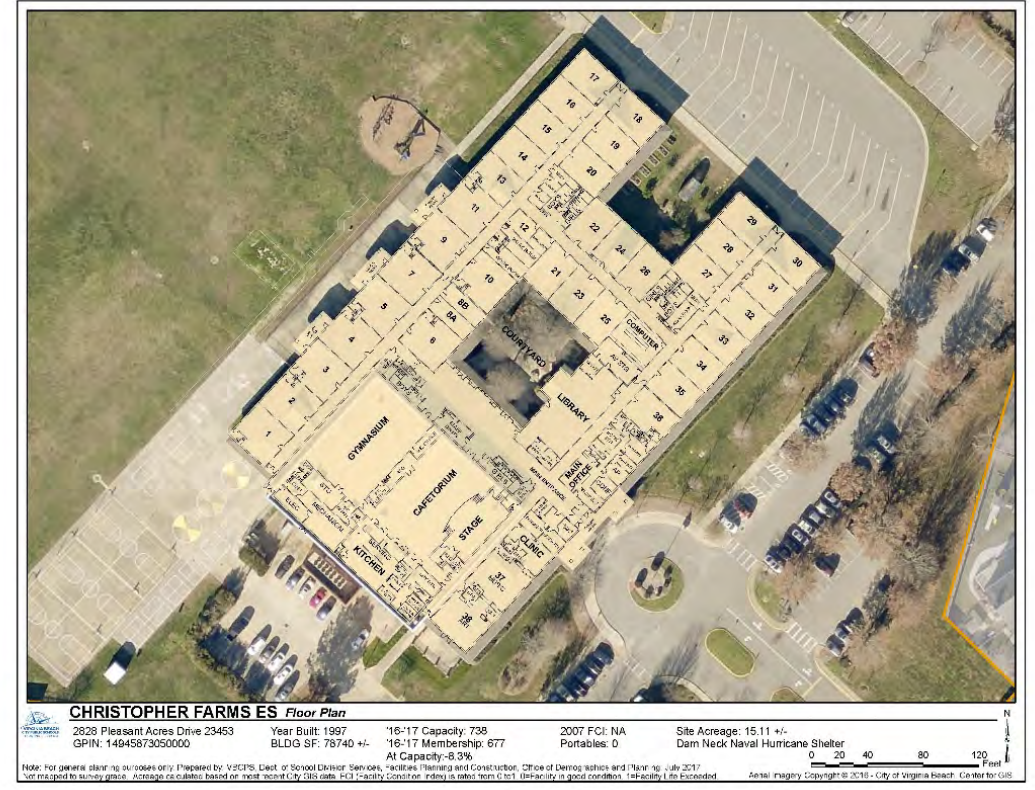
Prototypes

Fairfield Elementary School (1976)

Christopher Farms Elementary School (1997)



22 Built from 1961-1978

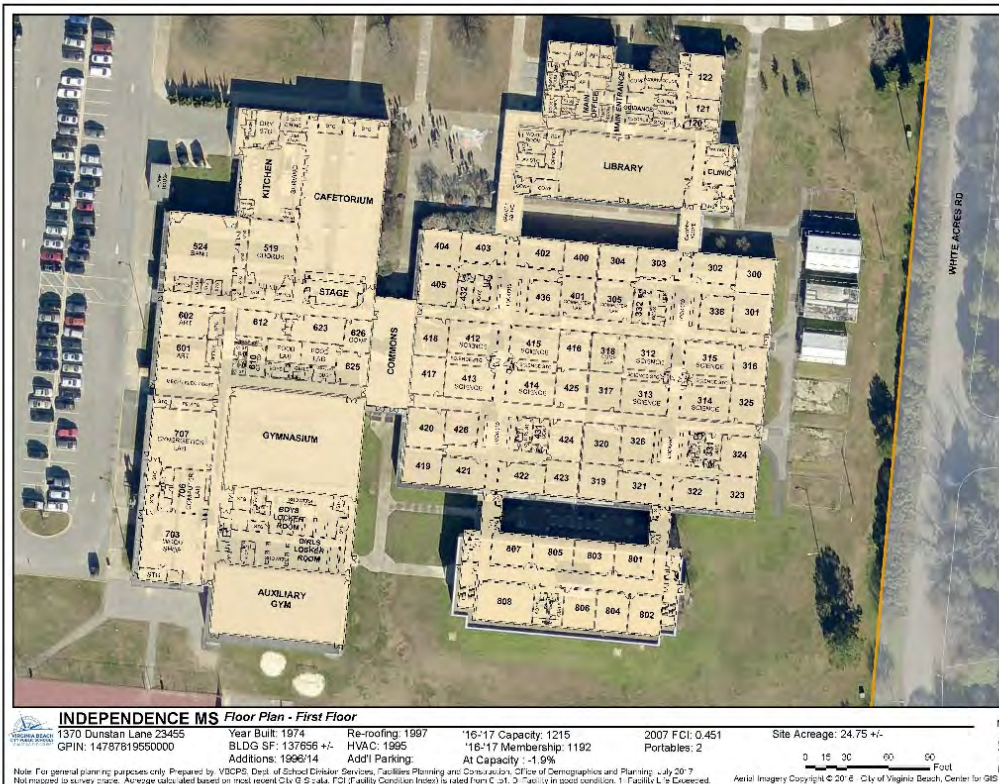


14 Built from 1997-2009

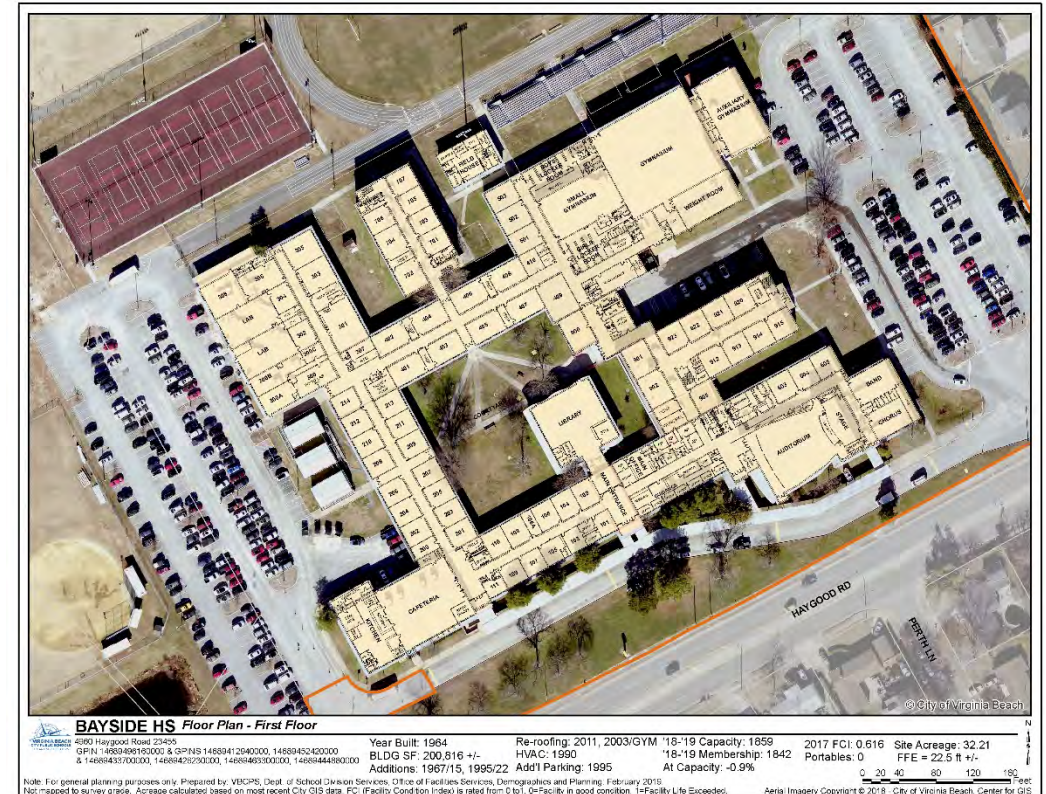
Prototypes

Independence Middle School (1974)

Bayside High School (1966)

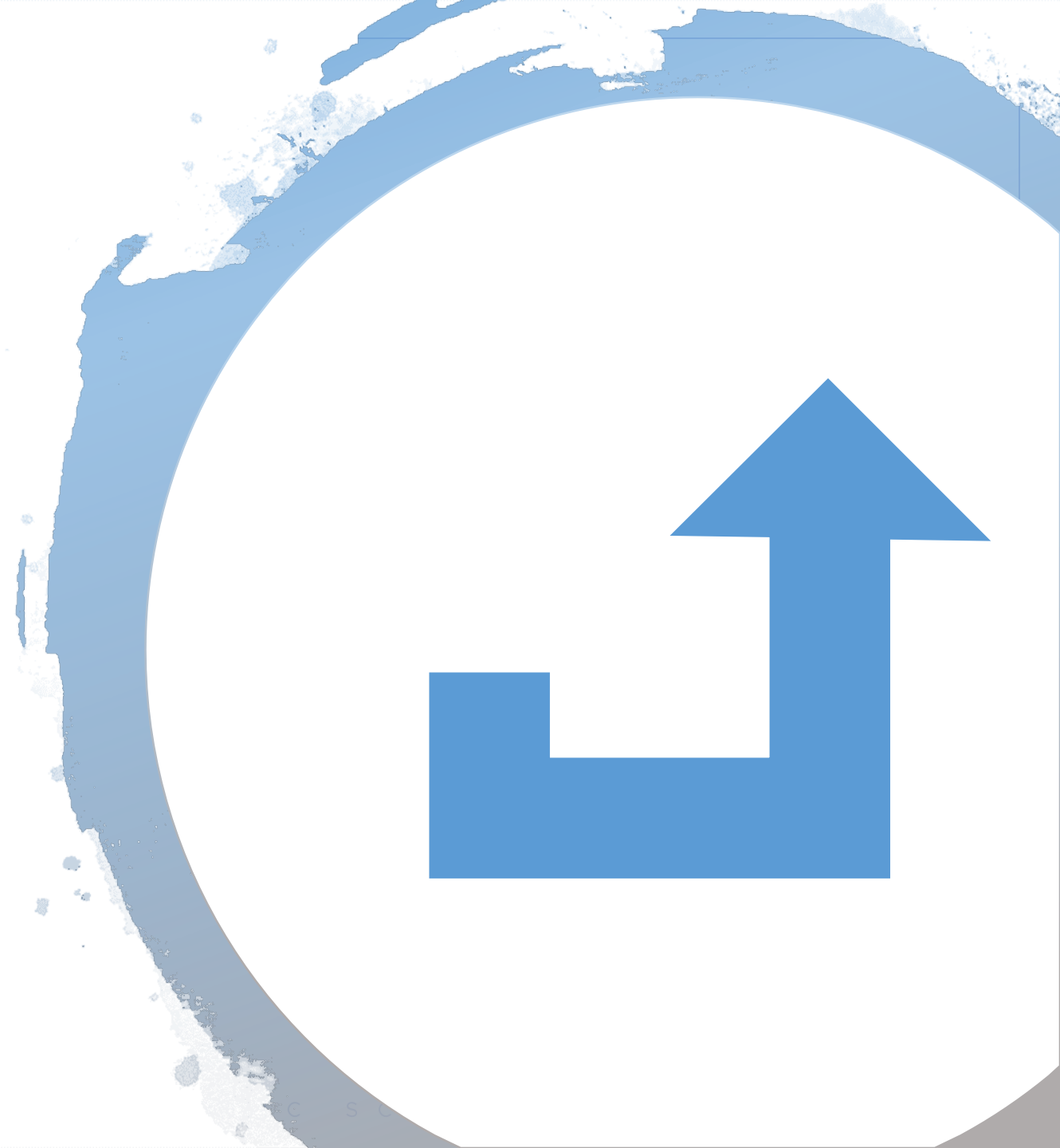


4 Built from 1969-1974



5 Built from 1962-1969

Return on Investment
(ROI)

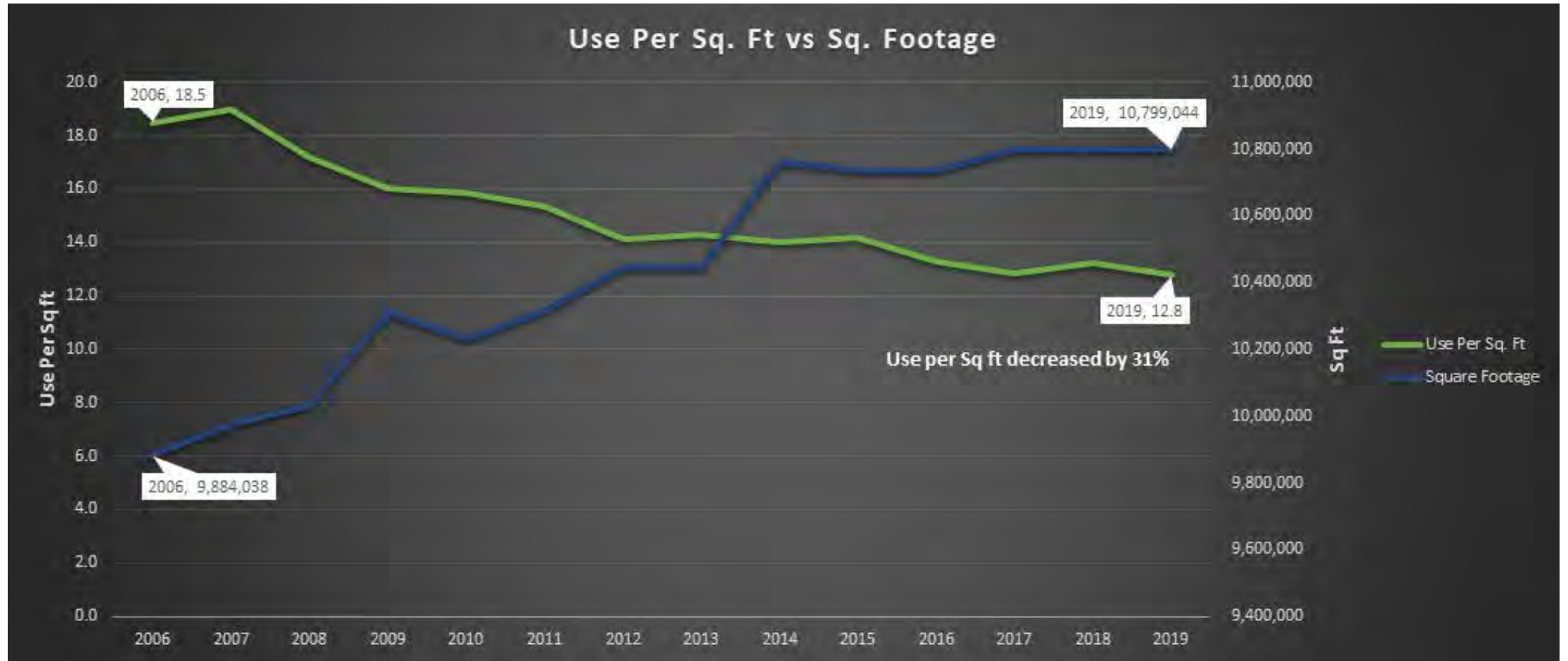


ROI Summary

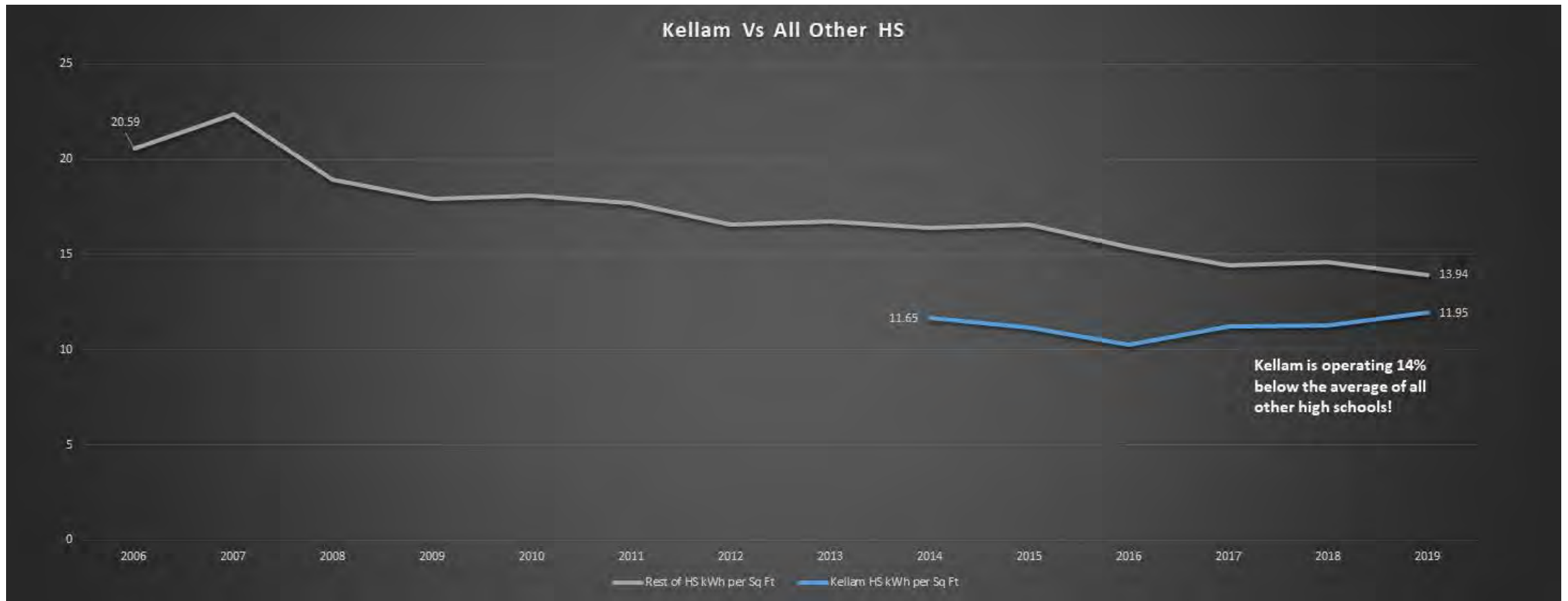
Utility Cost Data

- Division-Wide Cost Avoidance (2006 – 2018)
\$41 million
- Kellam High School (2014 – 2018)

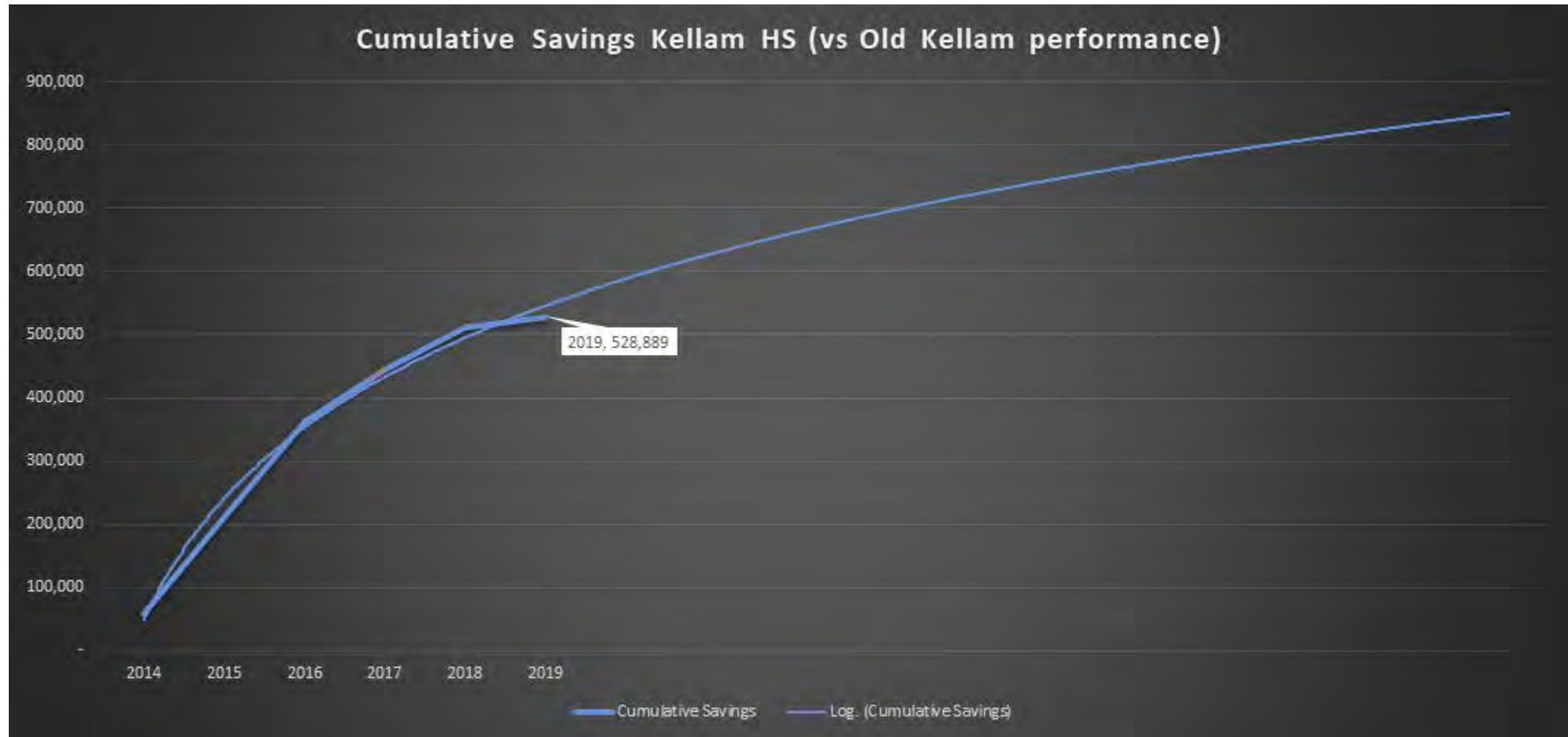
Use Per Square Foot vs Square Footage



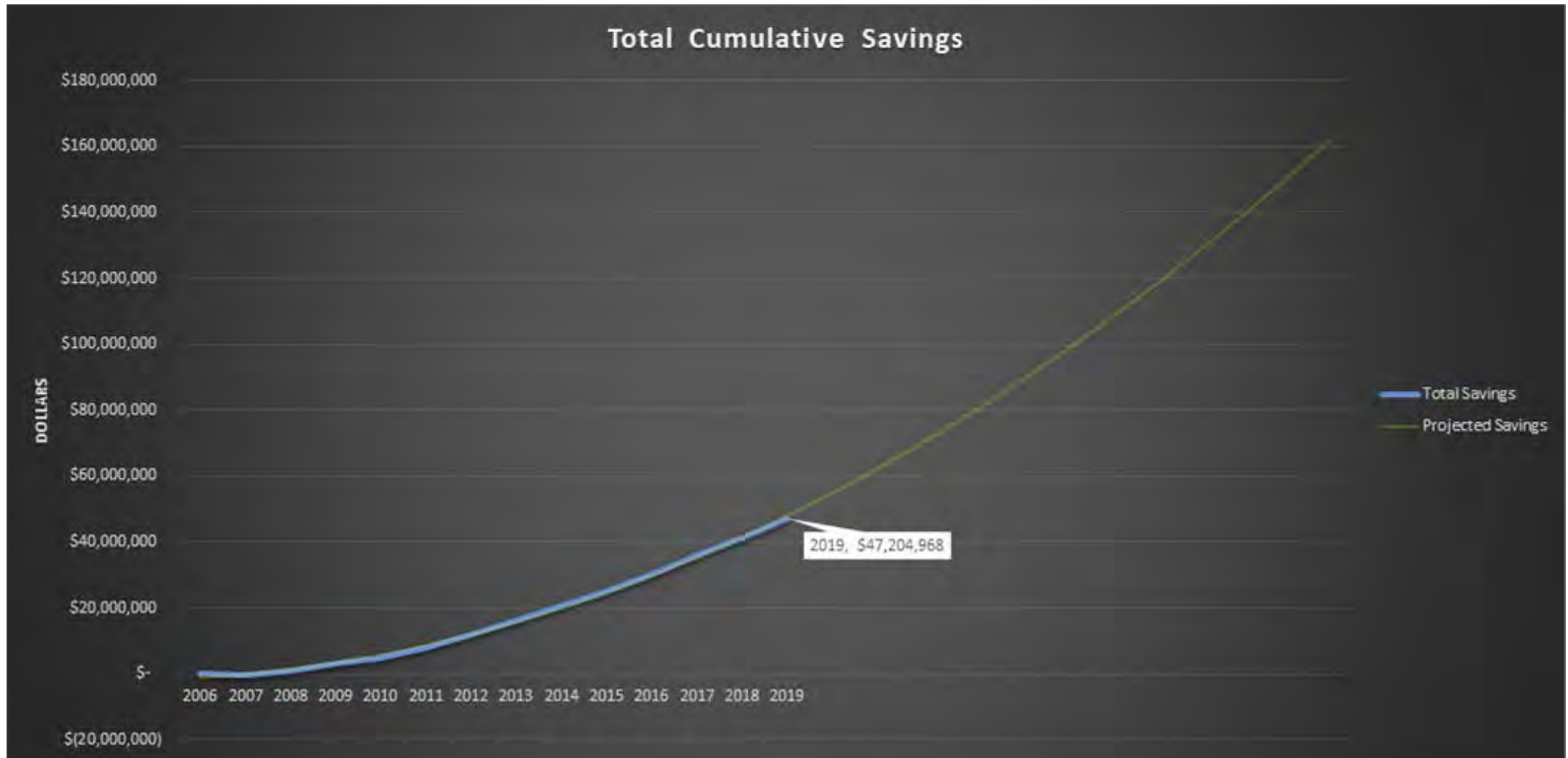
Kellam vs All Other High Schools



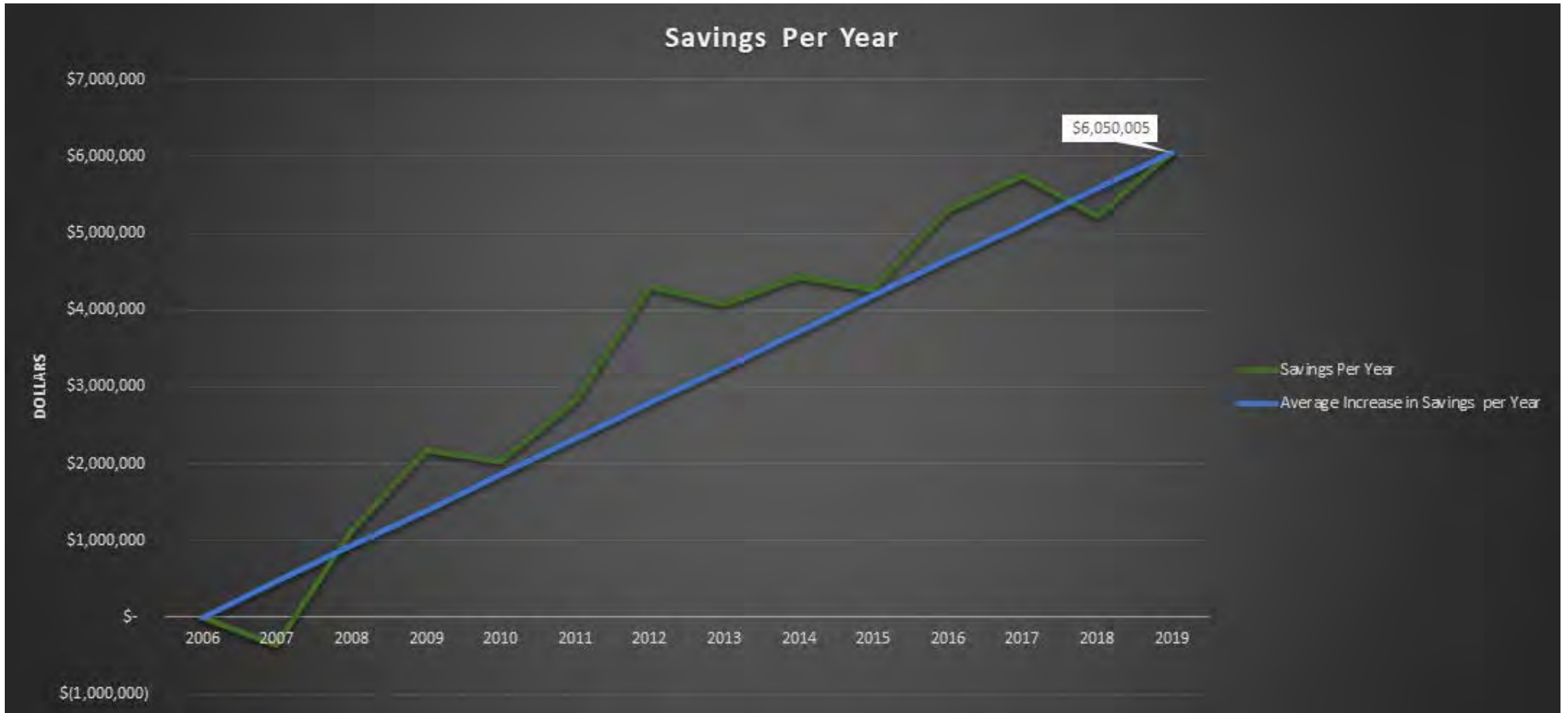
Cumulative Savings Kellam HS (vs Old Kellam performance)



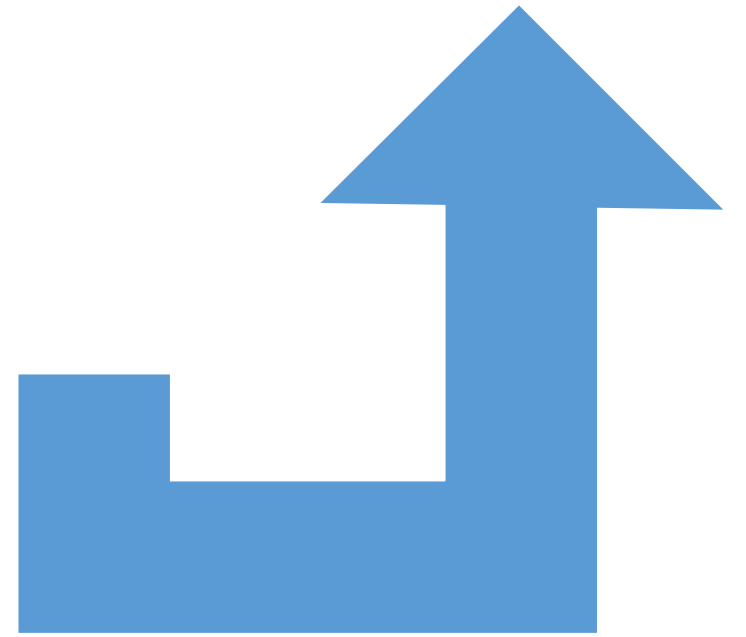
Total Cumulative Savings



Savings Per Year



Long Range CIP Needs



Recommendations

Funding Scenarios

The table below shows the recommended order of schools along with the estimated completion date and age at replacement for each school in each of the four funding scenarios. It should be noted that the order of projects varies based on the funding level, in order to finish all projects in as short of time as possible. This analysis includes a 5% yearly escalation of construction costs and a 3% yearly escalation in funding, for all scenarios.

Next 15 School Replacement Candidates	Original Construction Date	Scenario 1 40 M/Year Completion Date	Scenario 1 40 M/Year Age at Replacement	Scenario 2 60 M/Year Completion Date	Scenario 2 60 M/Year Age at Replacement	Scenario 3 80 M/Year Completion Date	Scenario 3 80 M/Year Age at Replacement	Scenario 4 100 M/Year Completion Date	Scenario 4 100 M/Year Age at Replacement
Princess Anne HS	1954	2028	74	2028	74	2028	74	2028	74
BF Williams (4-5) + Old Aragona ES (Bayside 6)	1963/1957	2054	94	2025	65	2024	64	2025	65
Princess Anne ES	1956	2050	94	2025	69	2024	68	2025	69
Bayside HS	1964	2030	66	2031	67	2028	64	2026	62
First Colonial HS	1966	2039	73	2036	70	2033	67	2032	66
Kempsville HS	1966	2046	80	2042	76	2039	73	2036	70
Holland ES	1967	2058	91	2027	60	2025	58	2028	61
Kempsville MS	1969	2065	96	2047	78	2031	62	2026	57
Bayside MS	1969	2072	103	2052	83	2036	67	2031	62
Independence MS	1974	2079	105	2056	82	2041	67	2036	62
Lynnhaven MS	1974	2086	112	2061	87	2045	71	2038	64
North Landing ES	1975	2090	115	2029	54	2028	53	2027	52
Green Run ES	1976	2094	118	2037	61	2029	53	2029	53
Fairfield ES	1976	2097	121	2046	70	2043	67	2029	53
White Oaks ES	1977	2101	124	2048	71	2043	66	2031	54
Average	1969	2066	97	2039	71	2033	65	2030	61

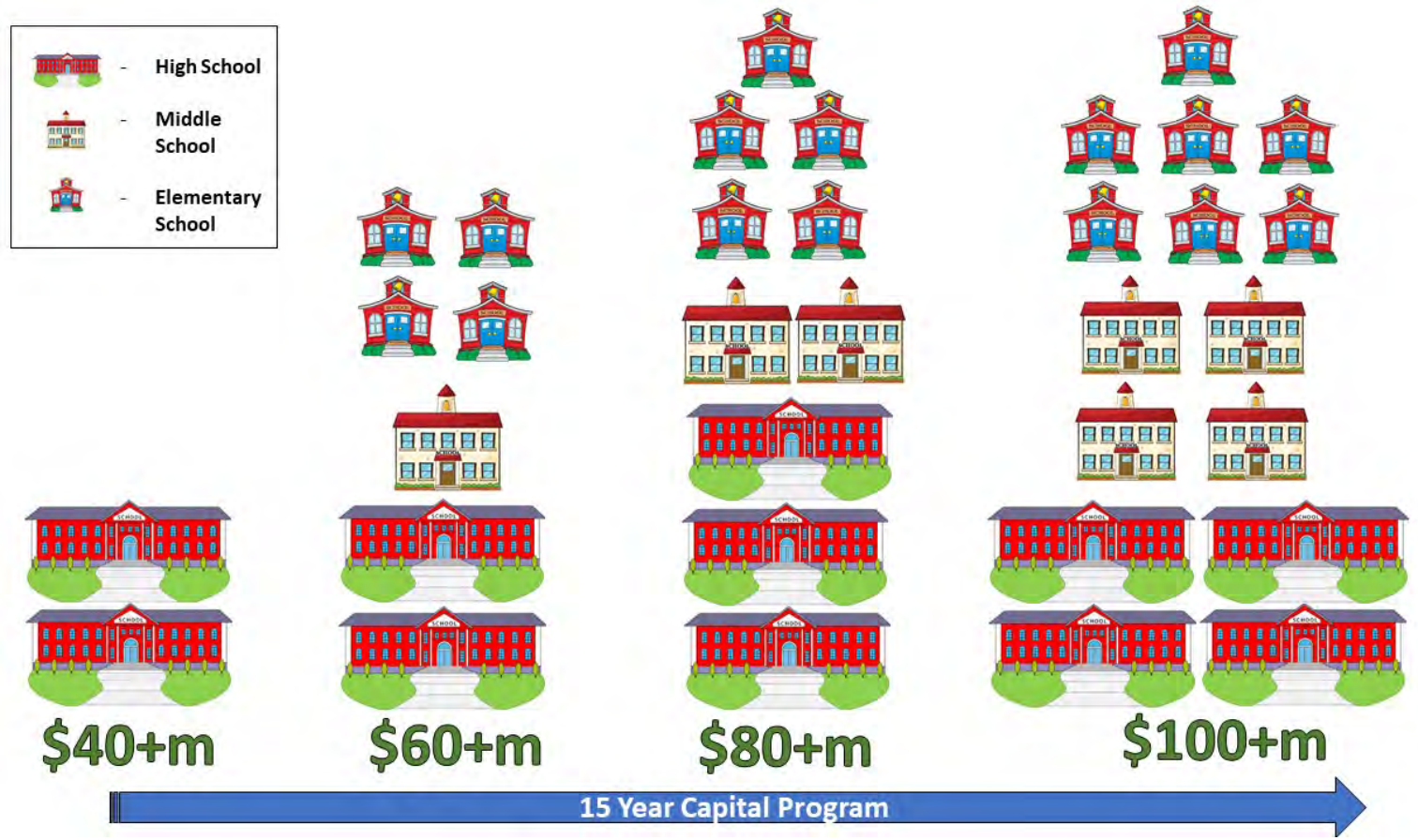
BF Williams replaced as a 4th-6th grade school, housing current Bayside 6th grade students

*Completion date adjusted to 2028 from 2023 based on funding and market conditions

Recommendations

FUNDING SCENARIOS

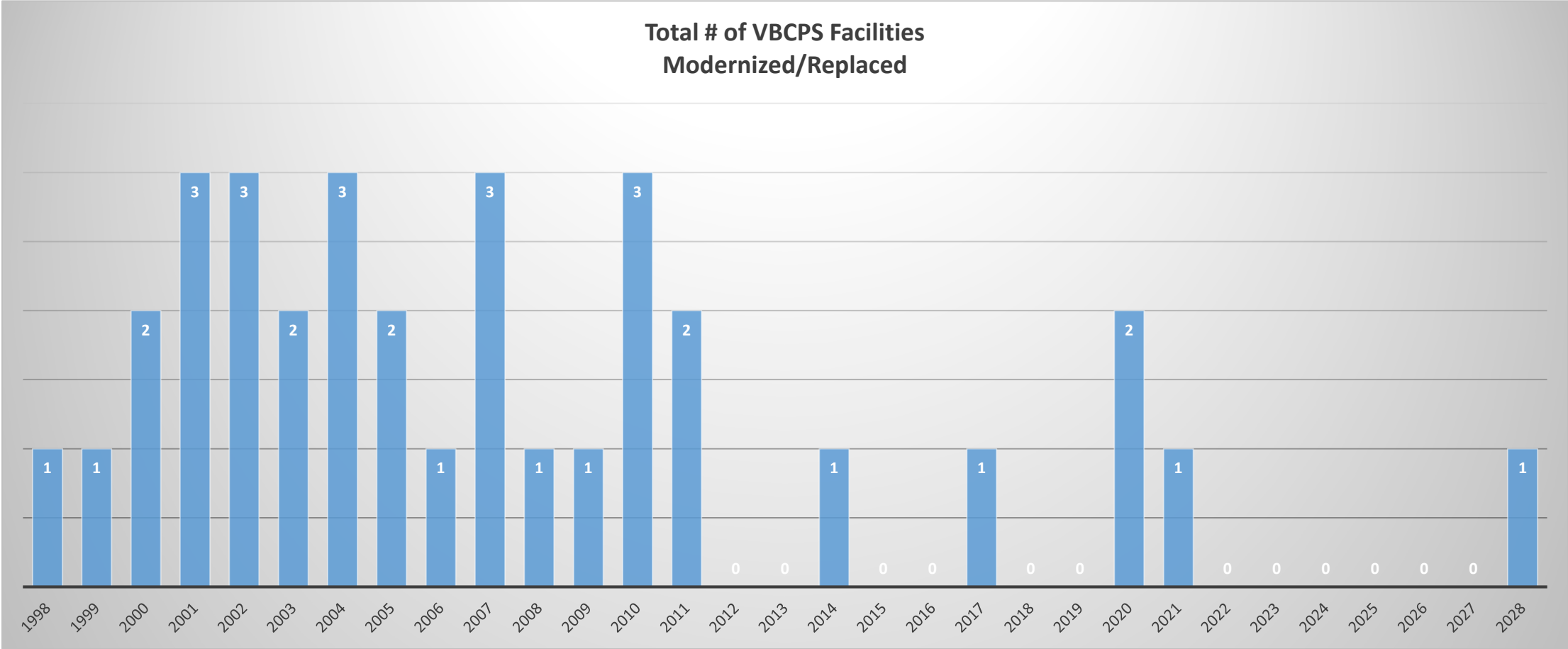
The graphic below displays the number and type of facilities that could be constructed within a 15 year capital program at each of the four funding levels. This analysis includes a 5% yearly escalation of construction costs and a 3% yearly escalation in funding, for all scenarios.



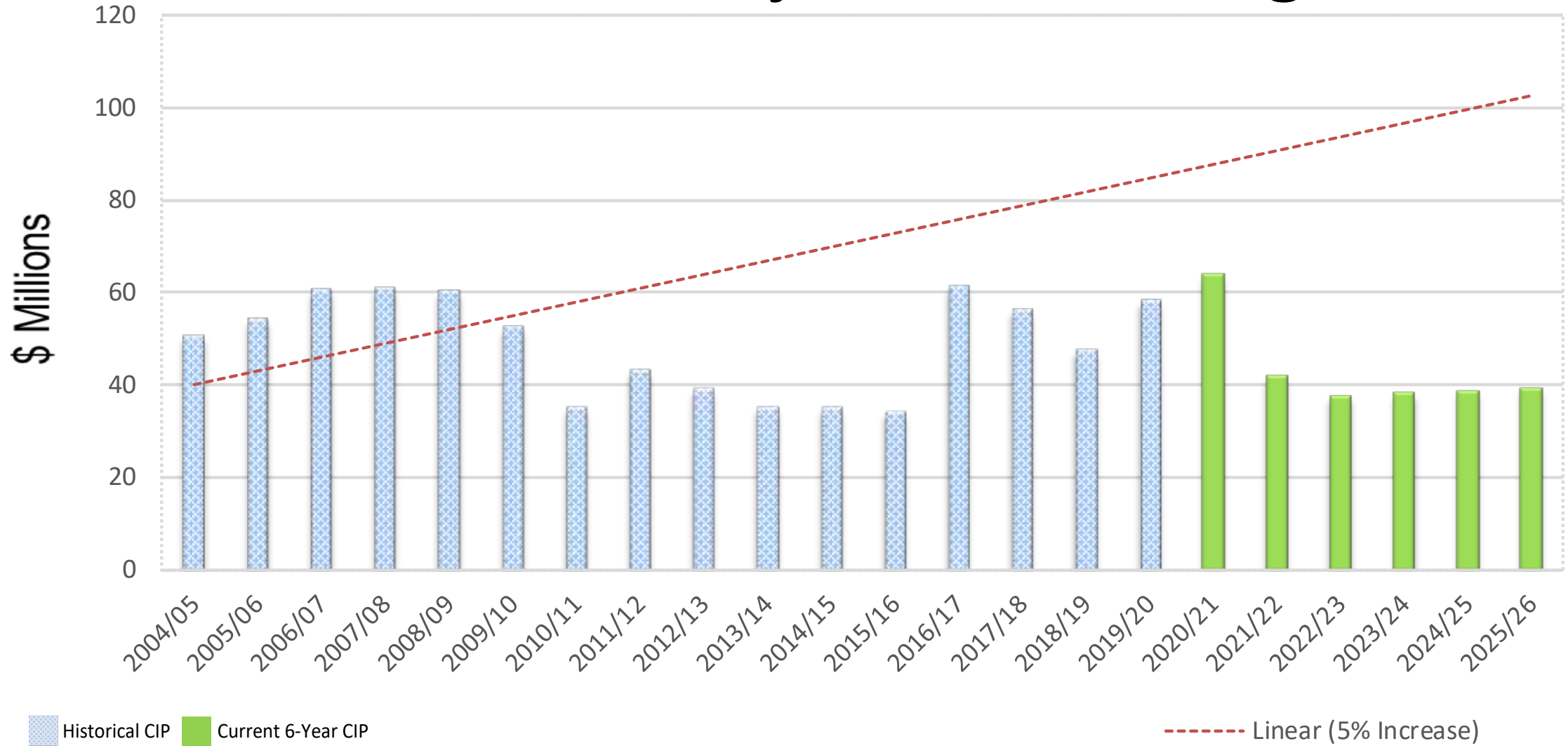
Schedule Based on Current Funding Levels

School	Originally Opened	Proposed Const. Complete	Opening vs. Competed
Princess Anne HS	1954	2028	73
B. F. Williams ES/Bayside 6 th	1961-1957	2030	69/73
Bayside HS	1964	2033	69
First Colonial HS	1966	2042	76
Kempsville HS	1966	2049	83
Princess Anne ES	1956	2056	100
Holland ES	1968	2060	92
Kempsville MS	1969	2068	99
Bayside MS	1969	2075	106
Independence MS	1974	2082	108
Lynnhaven MS	1974	2091	117
North Landing ES	1975	2091	116
Green Run ES	1975	2095	120
Fairfield ES	1976	2098	122
White Oaks ES	1978	2102	124
Average			100

Modernization/Replacement Schedule FY 1998-2028



Historical/Projected Funding



Additional Revenue Options

- Restore Pay-Go/Operating Budget to Previous Levels
- Additional Charter Bond Authority
- Help from the State – Lottery/State Construction Grants
- Year End Reversion Funds
- Continued Disposition/Sale of Excess Assets
- Bond Referendum
- Food Tax

Thank You

Aaron C. Spence, ED.D., Superintendent
Jack Freeman, Chief Operations Officer
Tony Arnold, P.E., Executive Director
