



# COATESVILLE AREA SCHOOL DISTRICT

## SCHOOL BOARD MEETING UPDATE ON MASTER PLANNING OPTIONS

27 June 2017

SCHRADERGROUP architecture



# AGENDA

- 1 Overview of Master Planning Process
- 2 Summary of Facility Assessments
- 3 Summary of Enrollment Projections
- 4 Summary of the Enrollment to Capacity Analysis
- 5 Workshop Goals and Outcomes
- 6 Shortlist of Preferred Options with Conceptual Budget Estimates



# MASTER PLANNING PROCESS

Month	Activity
<b>2016</b>	
June-Aug	Conduct Facility Assessments
Aug-Nov	Develop Facility Analysis
November	Presentation of Facility Analysis
<b>2017</b>	
Jan	Workshop #1 – Re-Presentation of Facility Analysis
Feb	Workshop #2 – Enrollment to Capacity Presentation
March/April	Options Development
April 26, 2017	Workshop #3 – Options & Budget Development
June 14, 2017	Workshop #4 – Finalize Options
June 27, 2017	School Board Presentation of Proposed Options





# MASTER PLANNING PROCESS

Planning Workshop - April 26, 2017



COATESVILLE AREA SCHOOL DISTRICT



# MASTER PLANNING PROCESS

Planning Workshop – June 14, 2017



COATESVILLE AREA SCHOOL DISTRICT



# FACILITY ASSESSMENTS

The Facility Assessments and Related Cost Estimates ...

- included only those renovations necessary to upgrade all building systems
- included necessary Code and ADA upgrades
- included renovations to improve security, air quality, comfort, lighting and energy efficiency
- did not include any upgrades to the modular classrooms
- did not include educational program modifications
- did not include additions to accommodate enrollment growth



# FACILITY ASSESSMENT SUMMARY

Building	Estimated Improvement Construction Cost	Soft Costs (30% of the Construction Cost)	Total Construction Costs	Square Footage	Cost Per Square Foot
North Brandywine MS	\$18,493,192	\$5,547,958	\$24,041,150	91,386	\$263.07
South Brandywine MS	\$18,062,757	\$5,418,827	\$23,481,584	91,386	\$256.95
Friendship ES	\$8,415,282	\$2,524,585	\$10,939,867	44,090	\$248.13
East Fallowfield ES	\$5,616,321	\$1,684,896	\$7,301,217	36,600	\$199.49
Caln ES	\$8,566,968	\$2,570,090	\$11,137,058	57,322	\$194.29
Kings Highway ES	\$7,748,496	\$2,324,549	\$10,073,045	52,314	\$192.55
Reeceville ES	\$5,043,352	\$1,513,006	\$6,556,358	66,440	\$98.68
Coatesville 9-10 SHS	\$6,572,547	\$1,971,764	\$8,544,311	196,976	\$43.38
Scott MS	\$3,533,291	\$1,059,987	\$4,593,278	138,655	\$33.13
Coatesville 11-12 SHS	\$5,123,724	\$1,537,117	\$6,660,841	264,194	\$25.21
Rainbow ES	\$90,225	\$27,068	\$117,293	115,710	\$1.01
<b>Total Construction Cost</b>			<b>\$113,446,002</b>		

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# ENROLLMENT PROJECTIONS

Prepared by

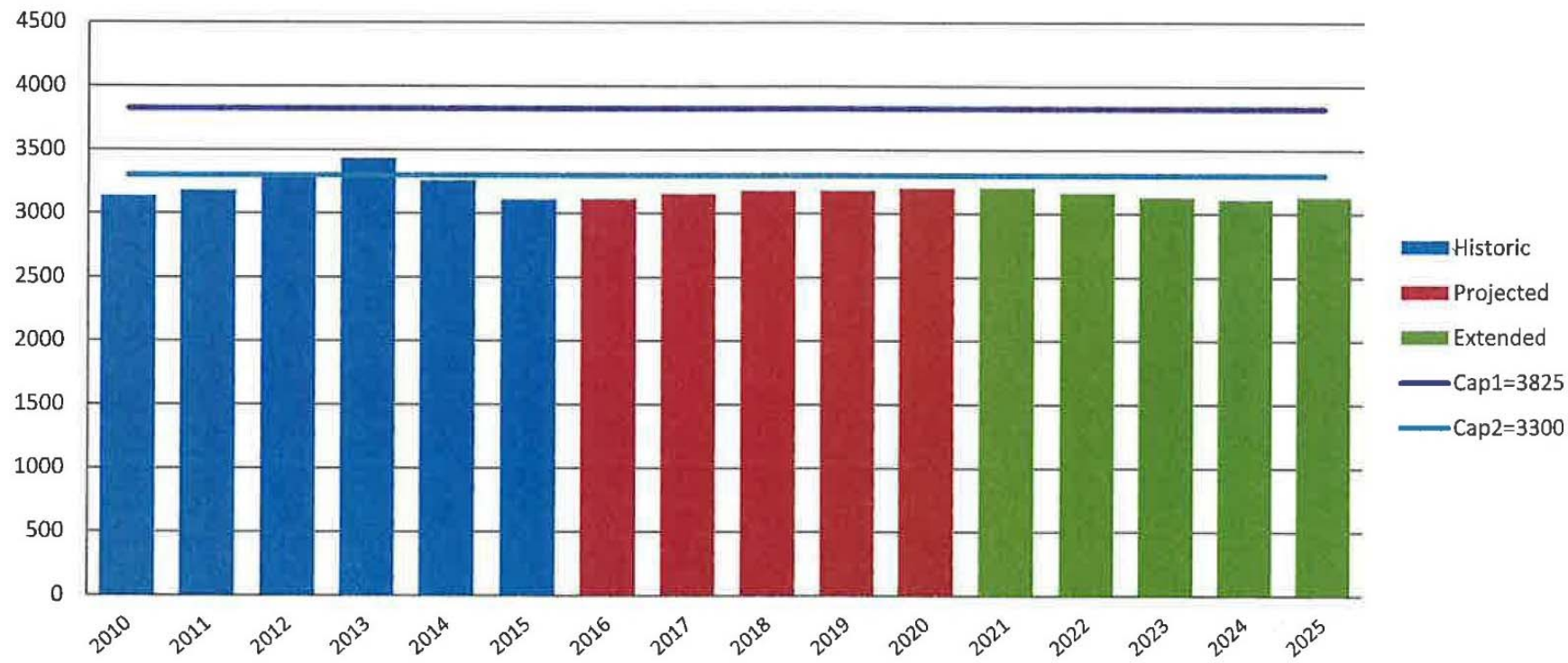


**Sundance Associates**  
117 Greenvale Court  
Cherry Hill, NJ 08034-1701

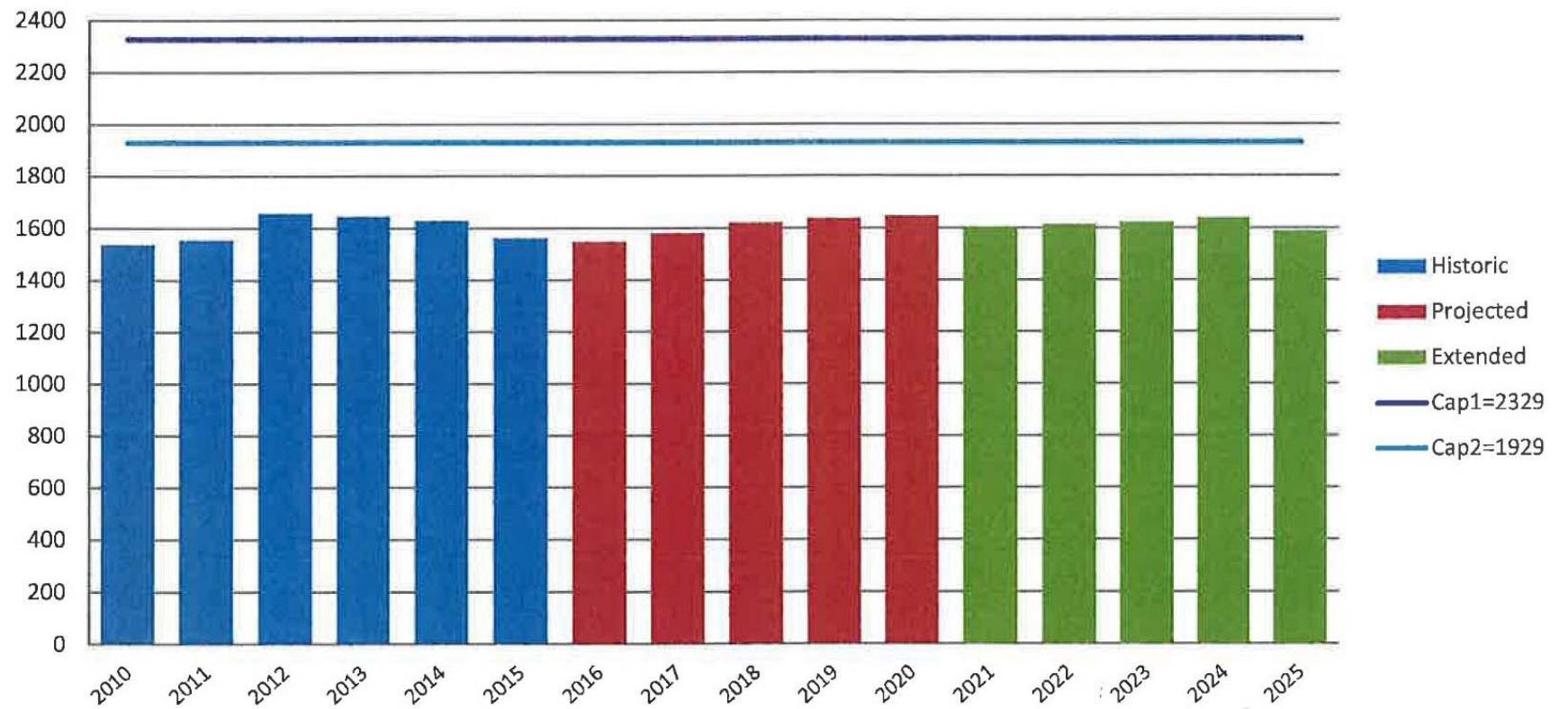
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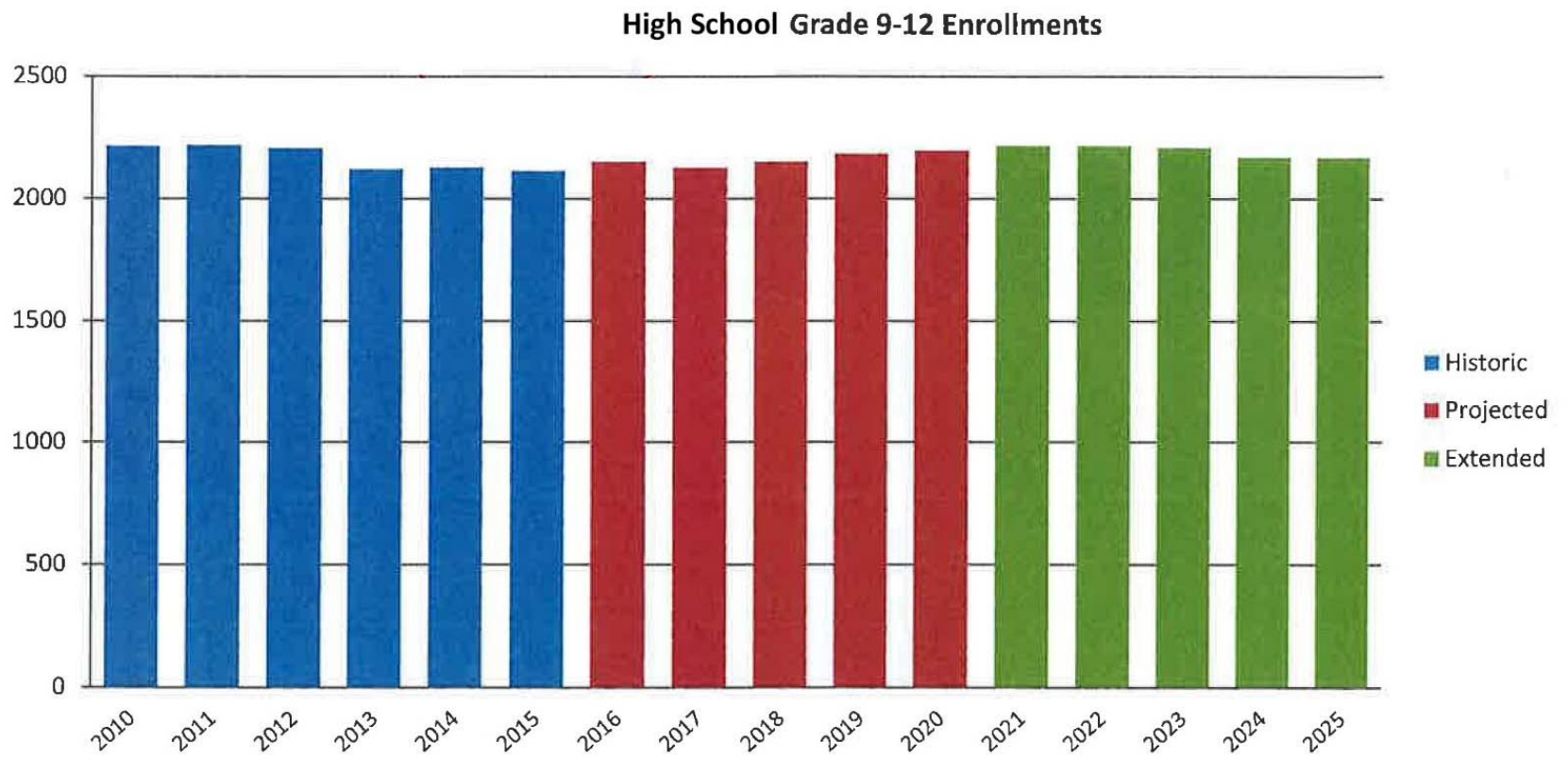
Elementary K-Gr 5 Enrollments



### Middle School Gr 6-8 Enrollments



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# ENROLLMENT TO CAPACITY ANALYSIS

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## CAPACITY ANALYSIS

- Conducted site visits of each school over 3 days (February 2nd, 7th and 14th) to review the current room use with the Principals
- Prepared floor plans showing the Current Room Use:
  - General instruction classrooms receive capacity based on CASD recommendations for class size:
    - 20 students for grades K-2
    - 25 students for grades 3-12
  - Special education classrooms receive capacity
  - Apply a utilization factor to accom. scheduling & enrollments:
    - 90% for elementary schools
    - 85% for middle schools
    - 80% for high schools
  - Rooms that support the educational program, such as art, music, gym, support services, etc. do not receive capacity (modified at the high school level)





## CAPACITY ANALYSIS

- Prepared floor plans showing the Proposed Functional Capacity of each school to meet program with the following adjustments:
  - Eliminate temporary modular classrooms
  - Eliminate classrooms and support rooms in the basement of the school
  - Provide the necessary support spaces in adequately sized rooms

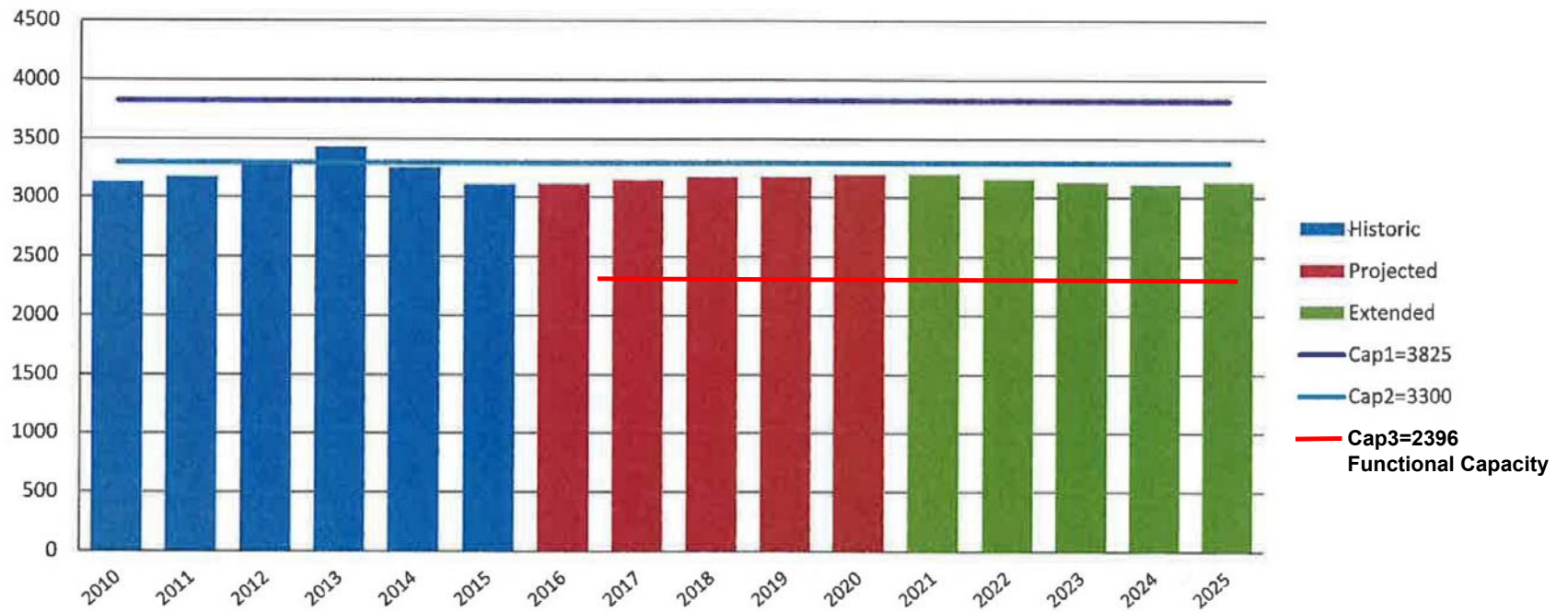


## ELEMENTARY SCHOOL FUNCTIONAL CAPACITY

BUILDING	2/13/2017 Enrollment	Functional Capacity	Functional Operating Capacity
Caln Elementary School	472	405	117%
East Fallowfield Elementary School	322	135	239%
Friendship Elementary School	353	278	127%
King's Highway Elementary School	475	355	134%
Rainbow Elementary School	806	683	118%
Reeceville Elementary School	446	540	83%
<b>SUB-TOTAL</b>	<b>2874</b>	<b>2396</b>	<b>478 Seats Deficient Averaging at 136% Capacity at the Elementary School Level (90% Recommended)</b>



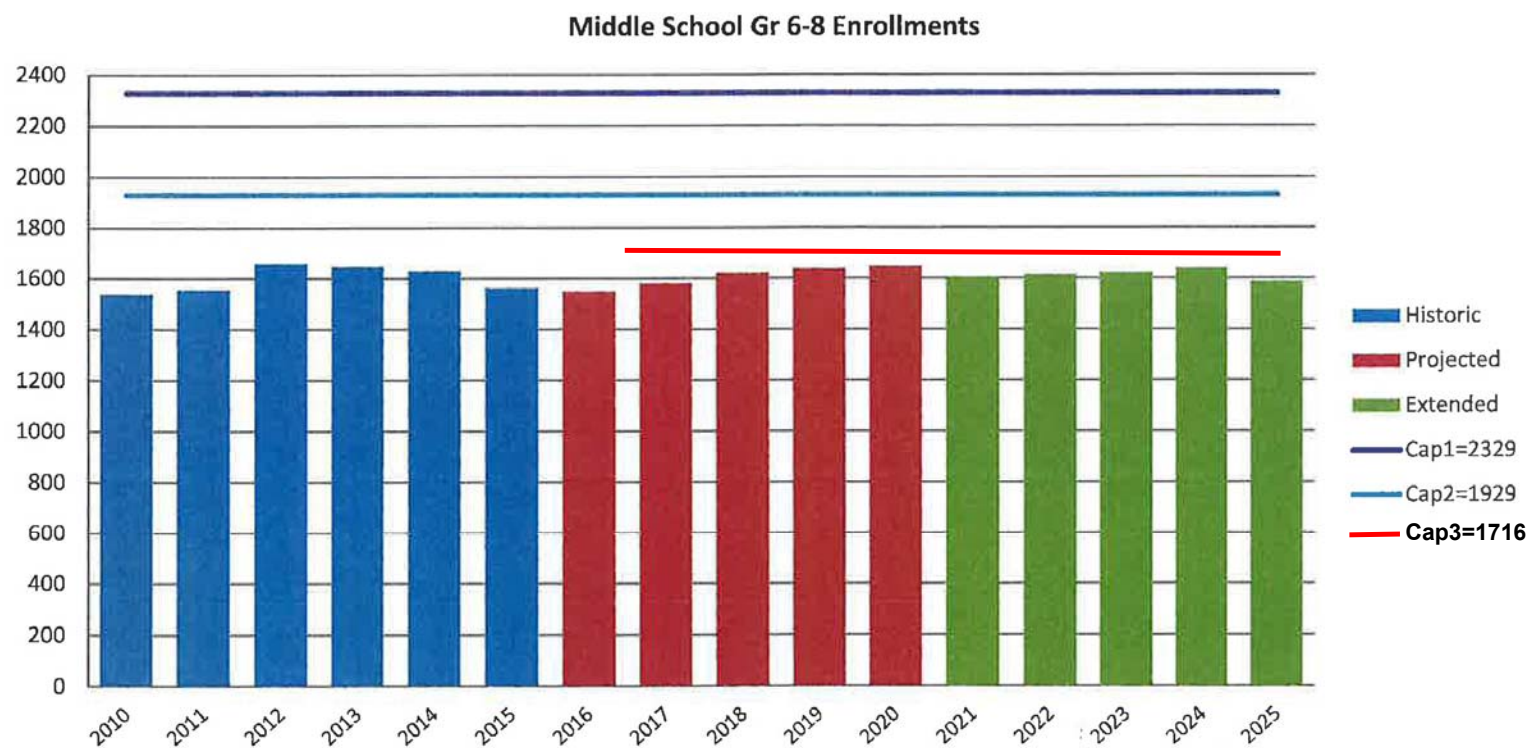
### Elementary K-Gr 5 Enrollments





## MIDDLE SCHOOL FUNCTIONAL CAPACITY

BUILDING	2/13/2017 Enrollment	Functional Capacity	Functional Operating Capacity
North Brandywine Middle School	418	475	76%
Scott Middle School	436	758	55%
<b>South Brandywine Middle School</b>	<b>588</b>	<b>483</b>	<b>116%</b>
<b>SUB-TOTAL</b>	<b>1442</b>	<b>716</b>	<b>274 Seats Available Averaging at 82% Capacity at the Middle School Level (85% Recommended)</b>



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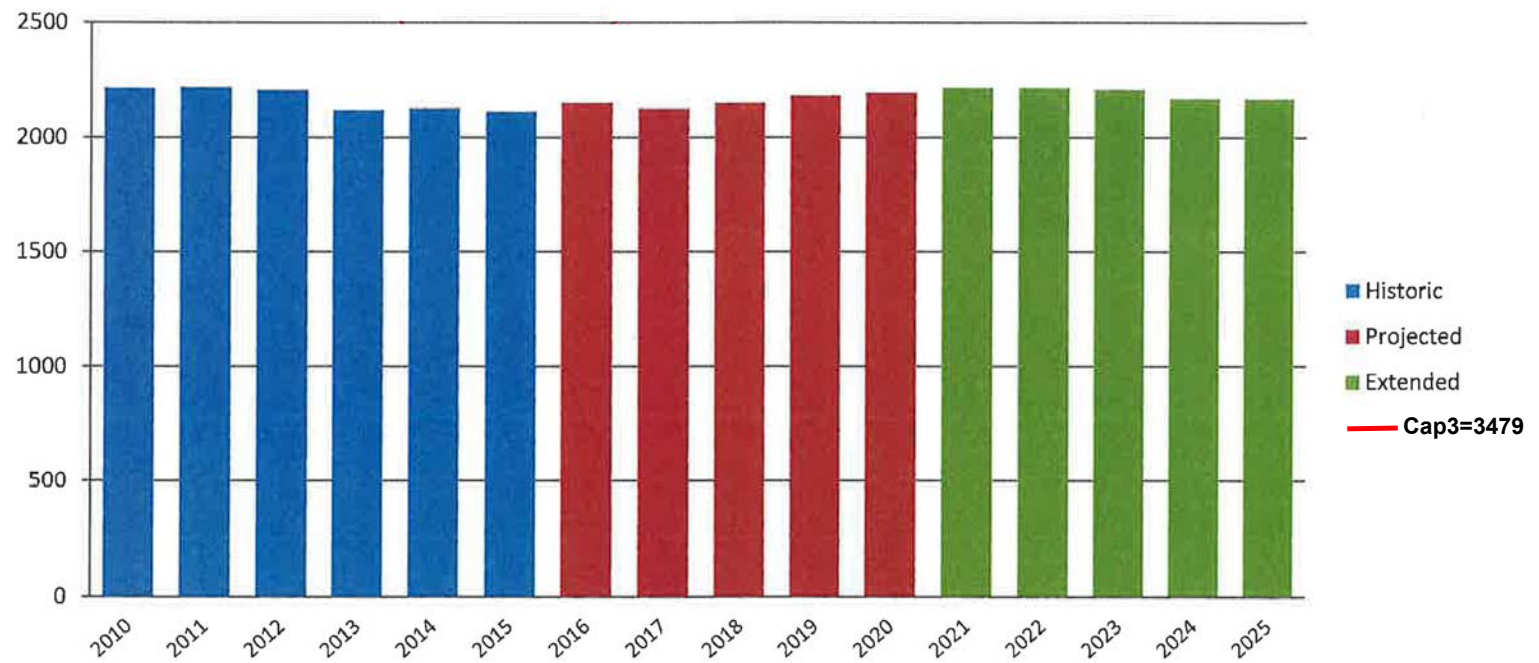


## HIGH SCHOOL FUNCTIONAL CAPACITY

BUILDING	2/13/2017 Enrollment	Functional Capacity	Functional Operating Capacity
CASD 9-10 Senior High School	999	1598	60%
CASD 11-12 Senior High School	990	1881	51%
<b>SUB-TOTAL</b>	<b>1989</b>	<b>3479</b>	<b>1490 Seats Available Averaging at 58% Capacity at the High School Level (80% Recommended)</b>



### High School Grade 9-12 Enrollments



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# WORKSHOP GOALS AND OUTCOMES



## DISTRICT-WIDE PLANNING OPTIONS WORKSHOPS

### Objective:

Workshop #3: To review and discuss preliminary district-wide planning options based on the results of the facility assessments and building capacity analysis to determine how the District can accommodate the program and projected enrollments.

Workshop #4: To narrow the field of options for school board consideration. Solutions should consider the facility needs, building capacities, educational and instructional benefits, and the District's fiscal responsibilities.

### Process:

Discuss the pros and cons associated with each option and through the process of elimination, collectively determine the most viable options for School Board consideration.



## WORKSHOP OUTCOMES

- Five (5) of the eleven (11) District-Owned schools are in good condition
  - ✓ Reeceville Elementary School
  - ✓ Rainbow Elementary School
  - ✓ Scott Middle School – originally designed as a high school
  - ✓ 9-10 Senior High School
  - ✓ 11-12 Senior High School
- Maintaining 11 schools is not sustainable. Options should consider reducing the number of schools





## WORKSHOP OUTCOMES (continued)

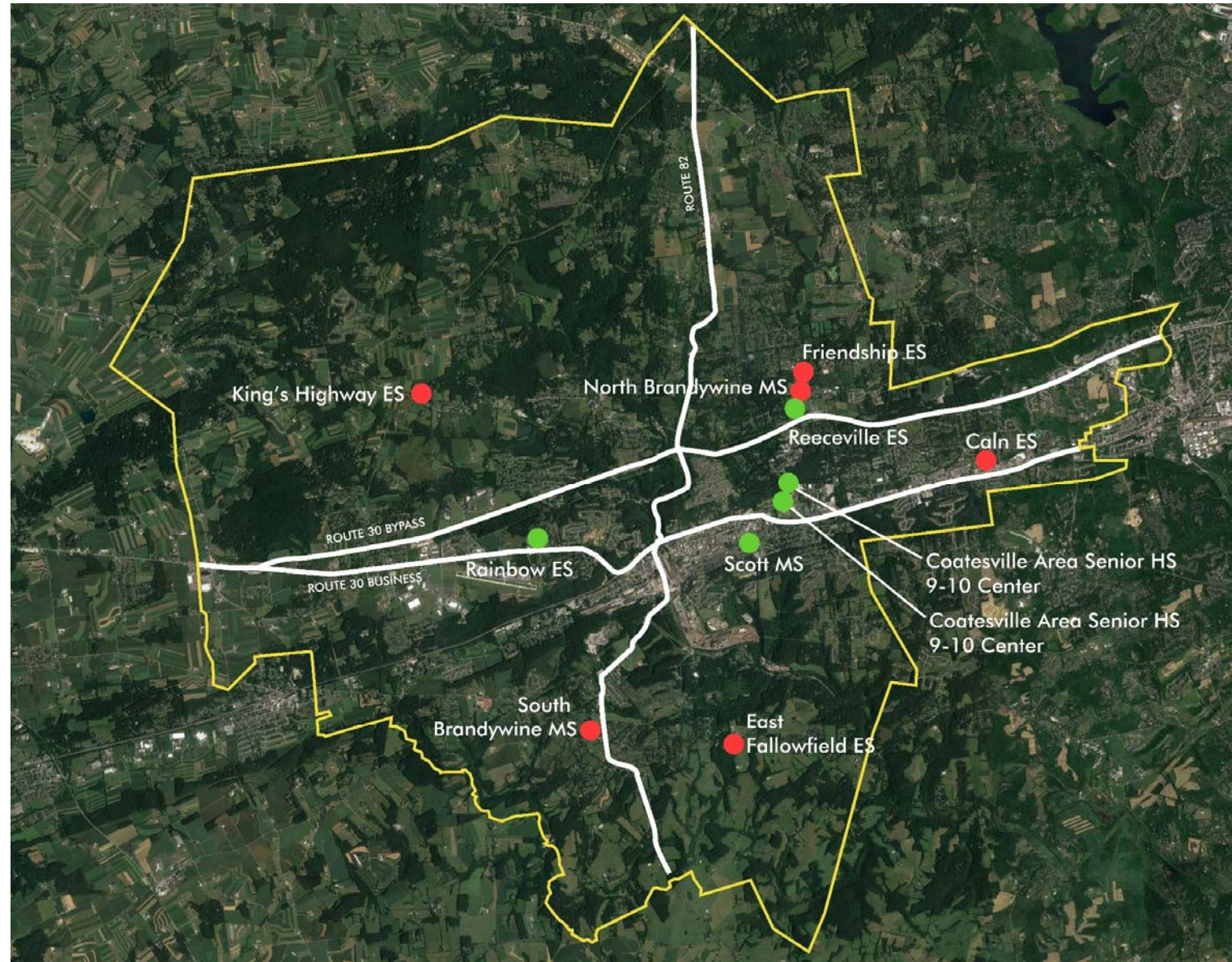
- “Neighborhood schools” at the elementary grade levels are desirable
- Grade level re-alignment should consider teaching certifications, age appropriateness, academics and athletics
- Consider grade level centers
- Consider transportation / travel times; grade levels riding on the bus together
- Consider operational costs
- Consider the overall budget – what can the district afford and how will the projects be phased to complete the build-out program?

## FACILITIES ASSESSMENT SUMMARY

- Buildings in Good Condition
- Buildings in Poor to Fair Condition

### Observations:

- *Schools in good condition are centered within the School District boundaries; all outlying buildings never renovated*



# BASELINE - CURRENT GRADE CONFIGURATION

## Baseline Construction Improvements Not Including Program or Capacity Modifications

Building/ Site	Current Grade Structure	Disposition	Current Enrollment (02.13.17)	Functional Building Capacity	Total Function' l Bldg Cap	Average 10-year Projection	Utilization %
Caln ES	K-5	current	472	405			
East Fallowfield ES	K-5	current	322	135			
Friendship ES	K-5	current	353	278			
King's Highway ES	K-5	current	475	355			
Rainbow ES	K-5	current	860	683			
Reeceville ES	K-5	current	446	540	2396	3156	132%
North Brandywine MS	6-8	current	418	475			
Scott MS	6-8	current	436	758			
South Brandywine MS	6-8	current	588	483	1716	1610	94%
Coatesville Senior HS	9-10	current	999	1598	1598	1120	70%
Coatesville Senior HS	11-12	current	990	1881	1881	1060	56%
TOTAL DISTRICT CAPACITY				7591			

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# SHORT-LIST OF PREFERRED OPTIONS

# OPTION 1 - MAINTAIN K-5 GRADE CONFIGURATION

## Option 1D: Maintain 8 Schools

### Major Renovations and Additions/New Replacement Schools

Building/ Site	Current Grade Structure	Disposition	Proposed Building Capacity	Total Function' l Bldg Cap	Average 10-year Projection	Utilization %
Caln ES		off-line				
East Fallowfield ES		off-line				
Friendship ES		off-line				
* King's Highway ES	K-5	new construction	900			
Portion of Rainbow ES Feeder Pattern						
* Rainbow ES	K-5	baseline renov. only	728			
* Reeceville ES	K-5	major renov./add'ns	900			
Friendship ES Feeder Pattern						
Portion of Caln ES Feeder Pattern						
* New ES @ S. Brandywine	K-5	new construction	900	3428	3156	92%
East Fallowfield ES Feeder Pattern						
Portion of Caln ES Feeder Pattern						
* Scott 6th Grade Center	6	baseline renov. only	758	758	535	71%
* North Brandywine MS	7-8	new construction	1300	1300	1074	83%
* Coatesville Senior HS	9-10	baseline renov. only	1598	1598	1120	70%
* Coatesville Senior HS	11-12	baseline renov. only	1881	1881	1060	56%
TOTAL DISTRICT CAPACITY			8965			

COATESVILLE AREA SCHOOL DISTRICT



## OPTION 1 - K-5 GRADE STRUCTURE

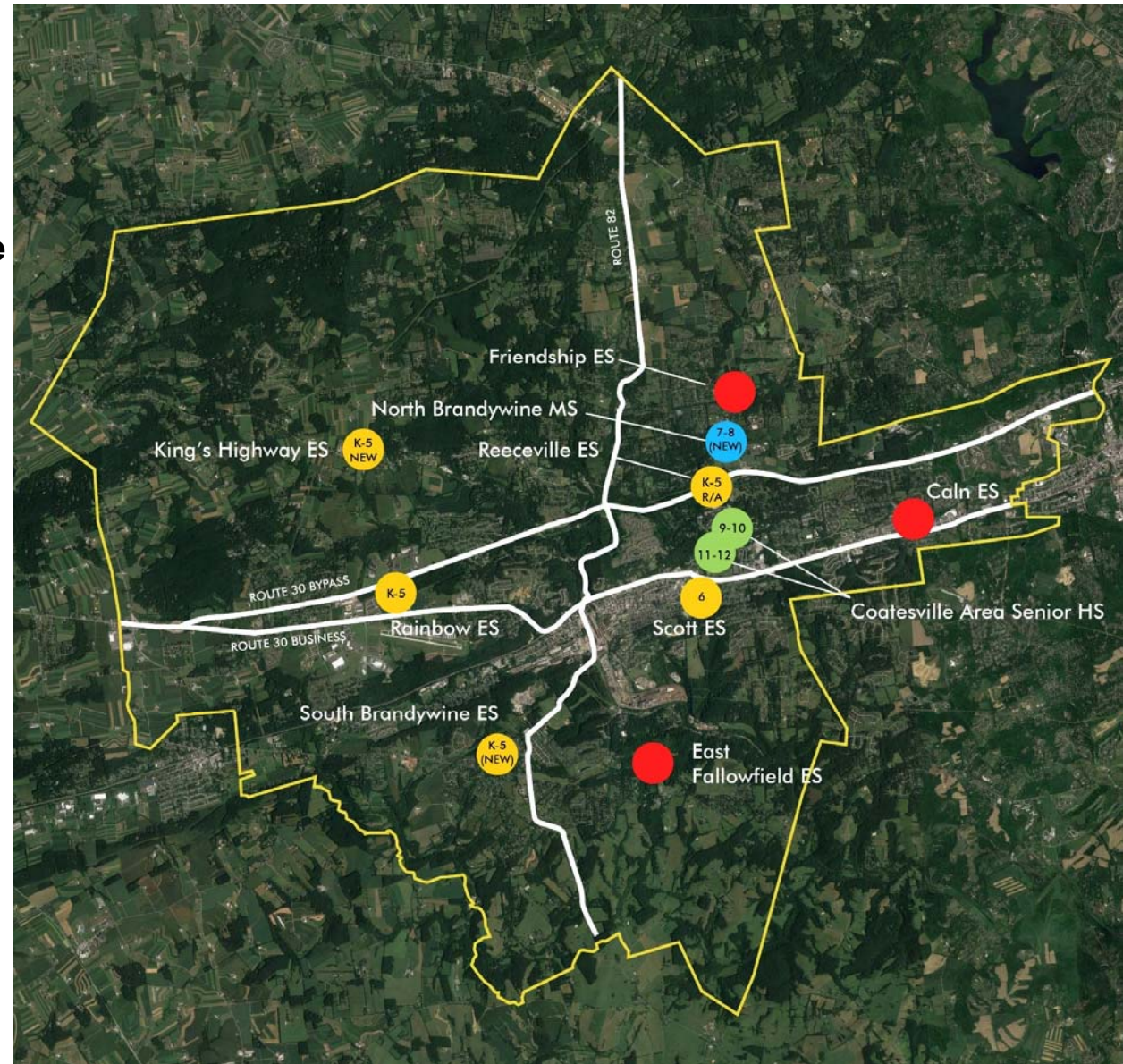
### Option 1D:

- Maintain 8 Schools
  - Caln, Friendship, East Fallowfield ESs off-line
  - Renovations/Additions at Reeceville ES; (2) New Elementary Replacement Schools
- Convert Scott MS to 6<sup>th</sup> Grade Center
- One new consolidated 7-8 Middle School

### Observations:

- *Regional K-5 Elementary Schools approx. the same size*
- *Scott 6<sup>th</sup> Grade Center could run on ES bus schedule*
- *All students together from Grade 6 through 12<sup>th</sup> Grades; schools centrally located in school district*
- *One new ES at South Brandywine campus; one new 7-8 School at the North Campus*

COATESVILLE AREA SCHOOL DISTRICT



# OPTION 1 - MAINTAIN K-5 GRADE CONFIGURATION

## Option 1E: Maintain 7 Schools

### Major Renovations and Additions/New Replacement Schools

Building/ Site	Current Grade Structure	Disposition	Proposed Building Capacity	Total Function' l Bldg Cap	Average 10-year Projection	Utilization %
Caln ES		off-line				
East Fallowfield ES		off-line				
Friendship ES		off-line				
* King's Highway ES	K-5	new construction	900			
Portion of Rainbow ES Feeder Pattern						
* Rainbow ES	K-5	baseline renov. only	728			
* Reeceville ES	K-5	major renov./add'ns	900			
Friendship ES Feeder Pattern						
Portion of Caln ES Feeder Pattern						
* New ES @ S. Brandywine	K-5	new construction	900	3428	3156	92%
East Fallowfield ES Feeder Pattern						
Portion of Caln ES Feeder Pattern						
* Scott 6th Grade Center	6	baseline renov. only	758	758	535	71%
* Coatesville MS	7-8	baseline renov. only	1598	1598	1075	67%
* Coatesville HS	9-12	additions	2713	2713	2180	80%
TOTAL DISTRICT CAPACITY			8497			

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## OPTION 1 - K-5 GRADE STRUCTURE

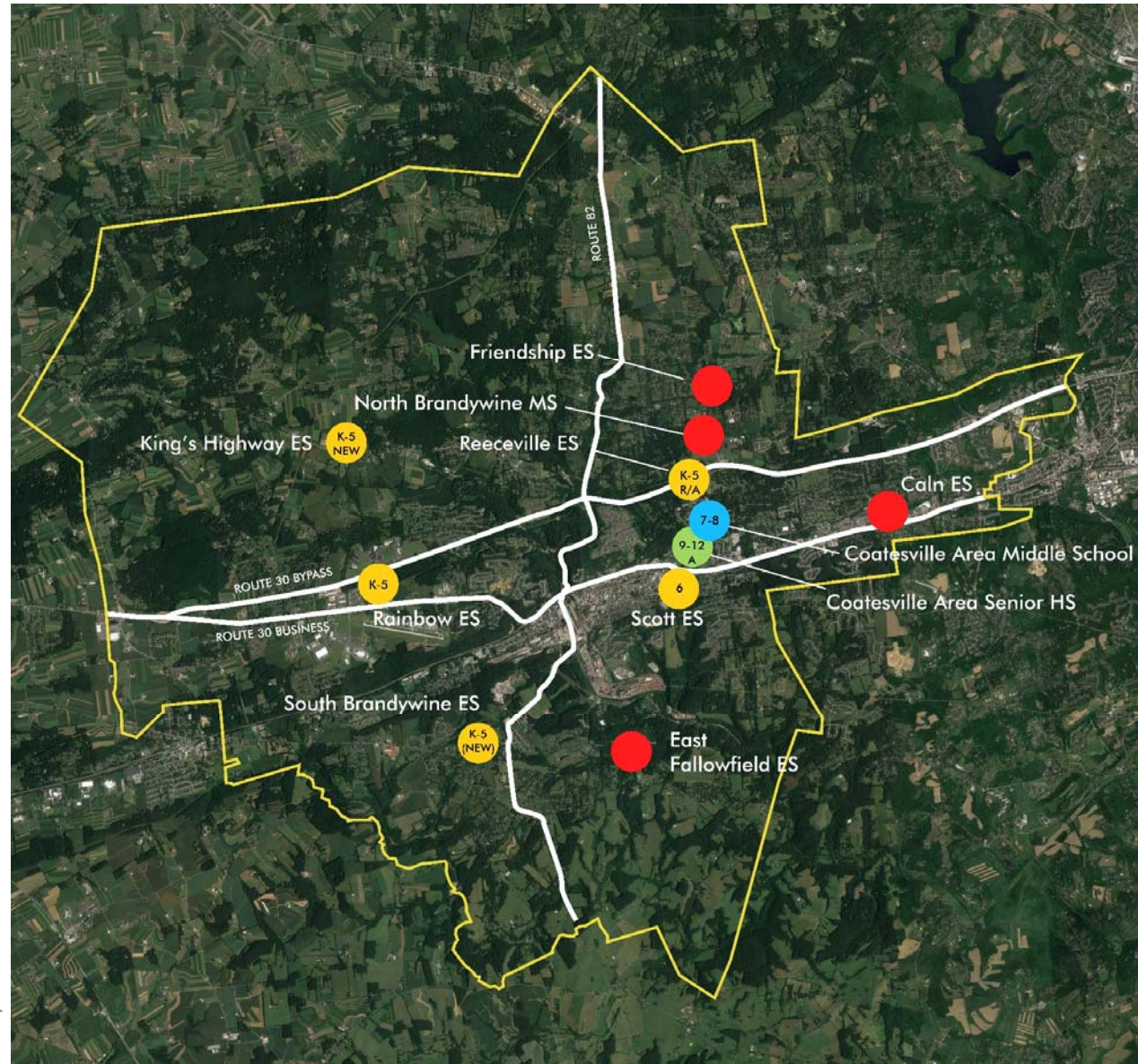
### Option 1E:

- Maintain 7 Schools
  - Caln, Friendship, East Fallowfield ESs off-line
  - Renovations/Additions at Reeceville ES; (2) New Elementary Replacement Schools
- Convert Scott MS to 6<sup>th</sup> Grade Center
- Convert 9-10 SHS to 7-8 MS
- Additions to 11-12 SHS to Convert to 9-12 HS

### Observations:

- *Regional K-5 Elementary Schools approx. the same size*
- *Scott 6<sup>th</sup> Grade Center could run on ES bus schedule*
- *All students together from Grade 6 through 12<sup>th</sup> Grades*
- *All secondary grades on one campus*
- *Additional money spent at the recently completed 11-12 High School to add on for grades 9-10*

COATESVILLE AREA SCHOOL DISTRICT



## OPTION 2 - GRADE RECONFIGURATION

### Option 2A: Maintain 10 Schools (5) K-4 Elementary Schools / (3) 5-8 Middle Schools

Building/ Site	New Grade Structure	Disposition	Proposed Building Capacity	Total Function'l Bldg Cap	Average 10-year Projection	Utilization %
Caln ES		off-line				
* East Fallowfield ES	K-4	major renovations	540			
* Friendship ES	K-4	major renovations	540			
* King's Highway ES	K-4	major renovations	540			
* Rainbow ES	K-4	baseline renov. only	683			
* Reeceville ES	K-4	baseline renov. only	540	2843	2630	93%
* North Brandywine MS	5-8	new construction	850			
* Scott MS	5-8	baseline renov. only	758			
* South Brandywine MS	5-8	new construction	850	2458	2136	87%
* Coatesville Intermediate HS	9-10	baseline renov. only	1598	1598	1120	70%
* Coatesville Senior HS	11-12	baseline renov. only	1881	1881	1060	56%
TOTAL DISTRICT CAPACITY			8780			



## OPTION 2 - GRADE RECONFIGURATION

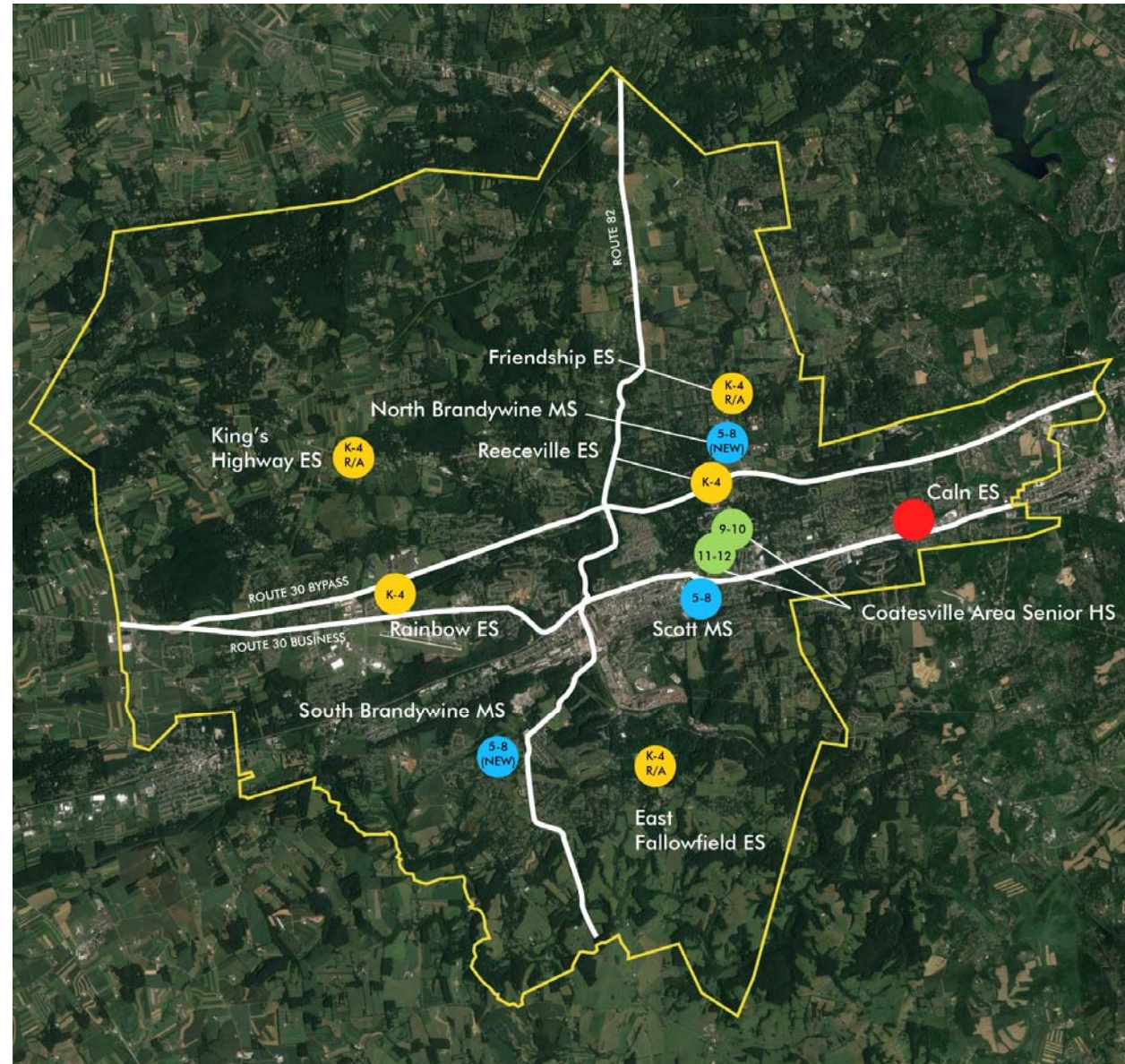
### Option 2A:

- Maintain 10 Schools
  - Caln ES off-line
  - Major Renovations/Additions at (3) Existing Elementary Schools for Grades K-4
- Two (2) new 5-8 Middle Schools
- Convert Scott MS to 5-8 MS

### Observations:

- *K-4 Elementary Schools approx. the same size; 5-8 Middle Schools approx. the same size*
- *(5) Elementary Schools sending to (3) Middle Schools*

COATESVILLE AREA SCHOOL DISTRICT



SUMMARY OF OPTIONS					
CONCEPTUAL BUDGET ESTIMATE					
	CONCEPT	RENOVATION/ ADDITION ESTIMATED IMPROVEMENT	NEW CONSTRUCTION ESTIMATED IMPROVEMENT	SOFT COSTS	TOTAL ESTIMATED COSTS FOR DISTRICT-WIDE
	<u>CURRENT GRADE CONFIGURATION</u>				
	BASELINE RENOVATIONS ONLY	\$87,266,157		\$26,179,847	\$113,446,004
	<u>MAINTAIN CURRENT GRADE CONFIGURATION</u>				
OPTION 1	OPTION 1D: MAINTAIN 8 SCHOOLS (4) K-5 ES / 6th GRADE CENTER / (1) NEW 7-8 MS	\$31,283,139	\$125,977,233	\$41,500,488	\$198,760,861
	OPTION 1E: MAINTAIN 7 SCHOOLS (4) K-5 ES / 6th GRADE CENTER / 7-8 MS (@ 9-10 BLDG) / 9-12 (@ 11-12 BLDG)	\$65,210,019	\$72,734,822	\$36,273,501	\$174,218,343
	<u>GRADE RECONFIGURATION</u>				
OPTION 2	OPTION 2A - MAINTAIN 10 SCHOOLS (5) K-4 ES / (3) 5-8 MS	\$68,902,875	\$86,609,822	\$41,247,827	\$196,760,524





COATESVILLE AREA SCHOOL DISTRICT  
*Partnering to enhance the student experience!*

**THANK YOU!**

# BASELINE SUMMARY-RENOVATION COSTS TO MEET CURRENT STANDARDS

CONCEPTUAL BUDGET ESTIMATE					
BUILDING	RENOVATION/ADDITION BUDGETARY CONSTRUCTION COST	NEW CONSTRUCTION BUDGETARY CONSTRUCTION COST	SOFT COSTS	TOTAL COSTS	
CALN ES	\$8,566,969	\$0	\$2,570,091	\$11,137,060	
EAST FALLOWFIELD ES	\$5,616,321	\$0	\$1,684,896	\$7,301,217	
FRIENDSHIP ES	\$8,415,283	\$0	\$2,524,585	\$10,939,868	
KING'S HIGHWAY ES	\$7,748,496	\$0	\$2,324,549	\$10,073,045	
RAINBOW ES	\$90,225	\$0	\$27,068	\$117,293	
REECEVILLE ES	\$5,043,351	\$0	\$1,513,005	\$6,556,357	
NORTH BRANDYWINE MS	\$18,493,192	\$0	\$5,547,958	\$24,041,150	
SCOTT MS	\$3,533,291	\$0	\$1,059,987	\$4,593,279	
SOUTH BRANDYWINE MS	\$18,062,757	\$0	\$5,418,827	\$23,481,584	
COATESVILLE 9-10 SENIOR HS	\$6,572,547	\$0	\$1,971,764	\$8,544,311	
COATESVILLE 11-12 SENIOR HS	\$5,123,724	\$0	\$1,537,117	\$6,660,841	
	\$87,266,157	\$0	\$26,179,847	\$113,446,004	
NOTE: ALL ESTIMATES BASED ON 2018 BID DATE					

COATESVILLE AREA SCHOOL DISTRICT

<b>OPTION 1D: MAINTAIN 8 SCHOOLS</b>							
<b>Renovations and Additions/New Replacement Schools</b>							
<b>CONCEPTUAL BUDGET ESTIMATE</b>							
<b>BUILDING</b>	<b>RENOVATION/ADDITION BUDGETARY CONSTRUCTION COST</b>	<b>NEW CONSTRUCTION BUDGETARY CONSTRUCTION COST</b>	<b>SOFT COSTS</b>	<b>TOTAL COSTS</b>			
CALN ES (OFF-LINE)	\$0	\$0	\$0	\$0			
EAST FALLOWFIELD ES (OFF-LINE)	\$0	\$0	\$0	\$0			
FRIENDSHIP ES (OFF-LINE)	\$0	\$0	\$0	\$0			
NEW KING'S HIGHWAY ES	\$0	\$36,367,411	\$9,455,527	\$45,822,938			
RAINBOW ES (BASELINE)	\$90,225	\$0	\$27,068	\$117,293			
REECEVILLE ES RENOVATIONS/ADDITIONS	\$15,963,351	\$0	\$4,150,471	\$20,113,823			
NEW ES AT SOUTH BRANDYWINE SITE		\$36,367,411	\$9,455,527	\$45,822,938			
SCOTT MS CONVERT TO 6TH (BASELINE)	\$3,533,291	\$0	\$1,059,987	\$4,593,279			
NORTH BRANDYWINE MS (OFF-LINE)	\$0	\$0	\$0	\$0			
SOUTH BRANDYWINE MS (OFF-LINE)	\$0	\$0	\$0	\$0			
NEW 7-8 BRANDYWINE MS AT NORTH CAMPUS	\$0	\$53,242,411	\$13,843,027	\$67,085,438			
COATESVILLE 9-10 SENIOR HS (BASELINE)	\$6,572,547	\$0	\$1,971,764	\$8,544,311			
COATESVILLE 11-12 SENIOR HS (BASELINE)	\$5,123,724	\$0	\$1,537,117	\$6,660,841			
	<b>\$31,283,139</b>	<b>\$125,977,233</b>	<b>\$41,500,488</b>	<b>\$198,760,861</b>			
NOTE: ALL ESTIMATES BASED ON 2018 BID DATE							

COATESVILLE AREA SCHOOL DISTRICT



OPTION 1E: MAINTAIN 7 SCHOOLS					
Renovations and Additions/New Replacement Schools					
CONCEPTUAL BUDGET ESTIMATE					
BUILDING	RENOVATION/ADDITION BUDGETARY CONSTRUCTION COST	NEW CONSTRUCTION BUDGETARY CONSTRUCTION COST	SOFT COSTS	TOTAL COSTS	
CALN ES (OFF-LINE)	\$0	\$0	\$0	\$0	
EAST FALLOWFIELD ES (OFF-LINE)	\$0	\$0	\$0	\$0	
FRIENDSHIP ES (OFF-LINE)	\$0	\$0	\$0	\$0	
NEW KING'S HIGHWAY ES	\$0	\$36,367,411	\$9,455,527	\$45,822,938	
RAINBOW ES (BASELINE)	\$90,225	\$0	\$27,068	\$117,293	
REECEVILLE ES RENOVATIONS/ADDITIONS	\$15,963,351	\$0	\$4,150,471	\$20,113,823	
NEW ES AT SOUTH BRANDYWINE SITE		\$36,367,411	\$9,455,527	\$45,822,938	
SCOTT MS CONVERT TO 6TH (BASELINE)	\$3,533,291	\$0	\$1,059,987	\$4,593,279	
NORTH BRANDYWINE MS (OFF-LINE)	\$0	\$0	\$0	\$0	
SOUTH BRANDYWINE MS (OFF-LINE)	\$0	\$0	\$0	\$0	
CONVERT CASD 9-10 SHS TO 7-8 MS (BASELINE)	\$6,572,547	\$0	\$1,971,764	\$8,544,311	
COATESVILLE 9-12 HS ADDITIONS ONLY	\$39,050,604	\$0	\$10,153,157	\$49,203,761	
	\$65,210,019	\$72,734,822	\$36,273,501	\$174,218,343	
NOTE: ALL ESTIMATES BASED ON 2018 BID DATE					

COATESVILLE AREA SCHOOL DISTRICT

OPTION 2A: MAINTAIN 10 SCHOOLS									
(5) K-4 Elementary Schools / (3) 5-8 Middle Schools									
CONCEPTUAL BUDGET ESTIMATE									
BUILDING	RENOVATION/ADDITION BUDGETARY CONSTRUCTION COST	NEW CONSTRUCTION BUDGETARY CONSTRUCTION COST	SOFT COSTS	TOTAL COSTS					
CALN ES	\$0	\$0	\$0	\$0					
EAST FALLOWFIELD ES	\$18,331,668	\$0	\$4,766,234	\$23,097,902					
FRIENDSHIP ES	\$16,412,926	\$0	\$4,267,361	\$20,680,287					
KING'S HIGHWAY ES	\$13,795,142	\$0	\$3,586,737	\$17,381,879					
RAINBOW ES (BASELINE)	\$90,225	\$0	\$27,068	\$117,293					
REECEVILLE ES (BASELINE)	\$5,043,351	\$0	\$1,513,005	\$6,556,357					
NORTH BRANDYWINE 5-8 MS	\$0	\$43,304,911	\$11,259,277	\$54,564,188					
SCOTT 5-8 MS (BASELINE)	\$3,533,291	\$0	\$1,059,987	\$4,593,279					
SOUTH BRANDYWINE 5-8 MS	\$0	\$43,304,911	\$11,259,277	\$54,564,188					
COATESVILLE 9-10 SENIOR HS (BASELINE)	\$6,572,547	\$0	\$1,971,764	\$8,544,311					
COATESVILLE 11-12 SENIOR HS (BASELINE)	\$5,123,724	\$0	\$1,537,117	\$6,660,841					
	\$68,902,875	\$86,609,822	\$41,247,827	\$196,760,524					
NOTE: ALL ESTIMATES BASED ON 2018 BID DATE									

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