



Mecklenburg County School Facilities Community Input Study Steering Committee Meeting

April 21, 2016

Mission Statement:

The mission of the Mecklenburg County Public Schools is to prepare all students so that they develop the knowledge and skills to achieve success and become active citizens who contribute to their communities.



Crabtree, Rohrbaugh & Associates - Architects



Meeting Agenda



AGENDA

1. Facility Options

- a. *Review from April 7th meeting*

2. Facility Options / Costs Review

- a. *Programming Framework*
- b. *Construction Costs*
- c. *Staffing, Operations & Maintenance Costs*

3. Discussion

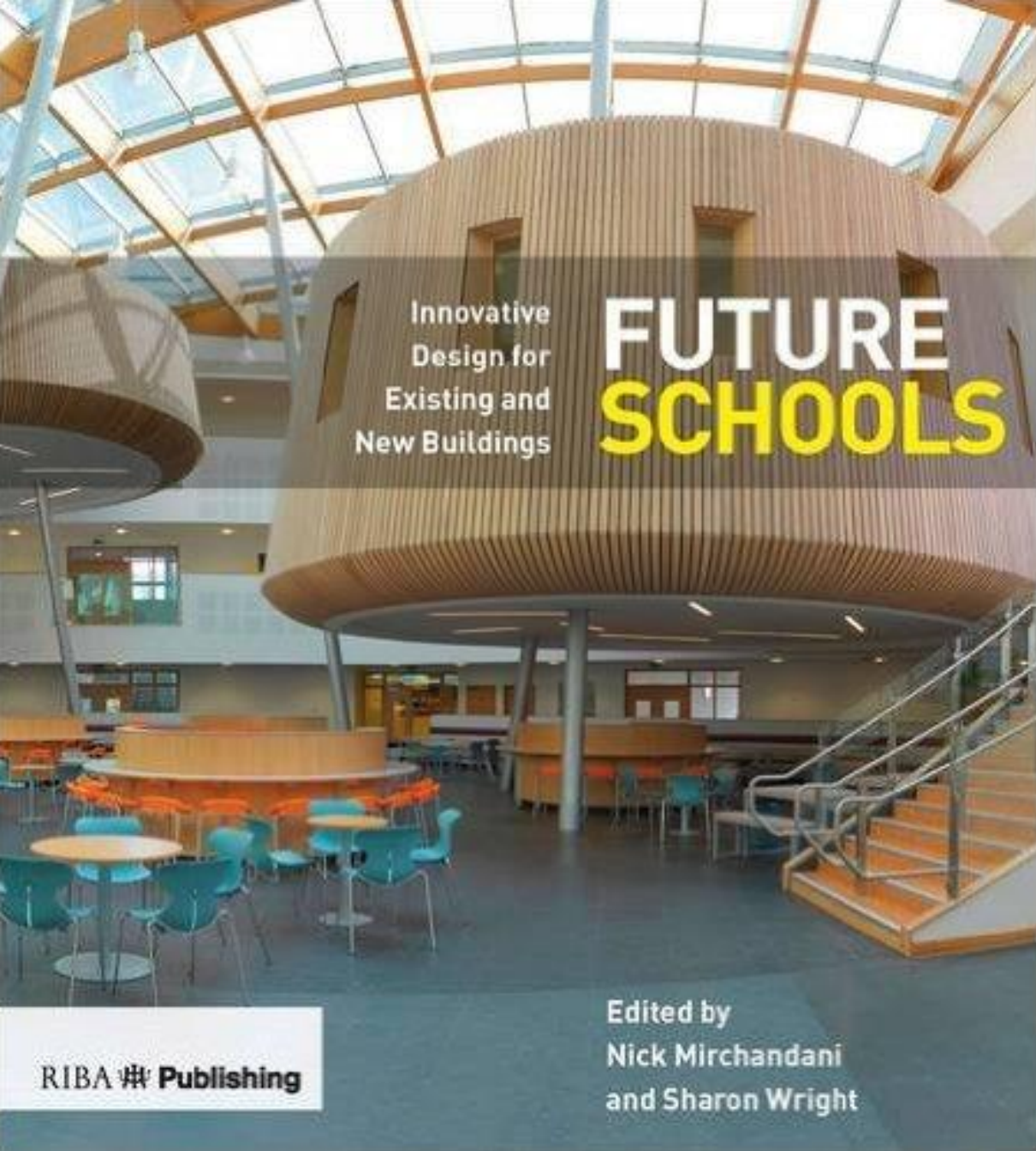
- a. *Demographics*
- b. *Option Matrix*

4. Community Meetings Overview

Community Input Study

Steering Committee Meeting #4





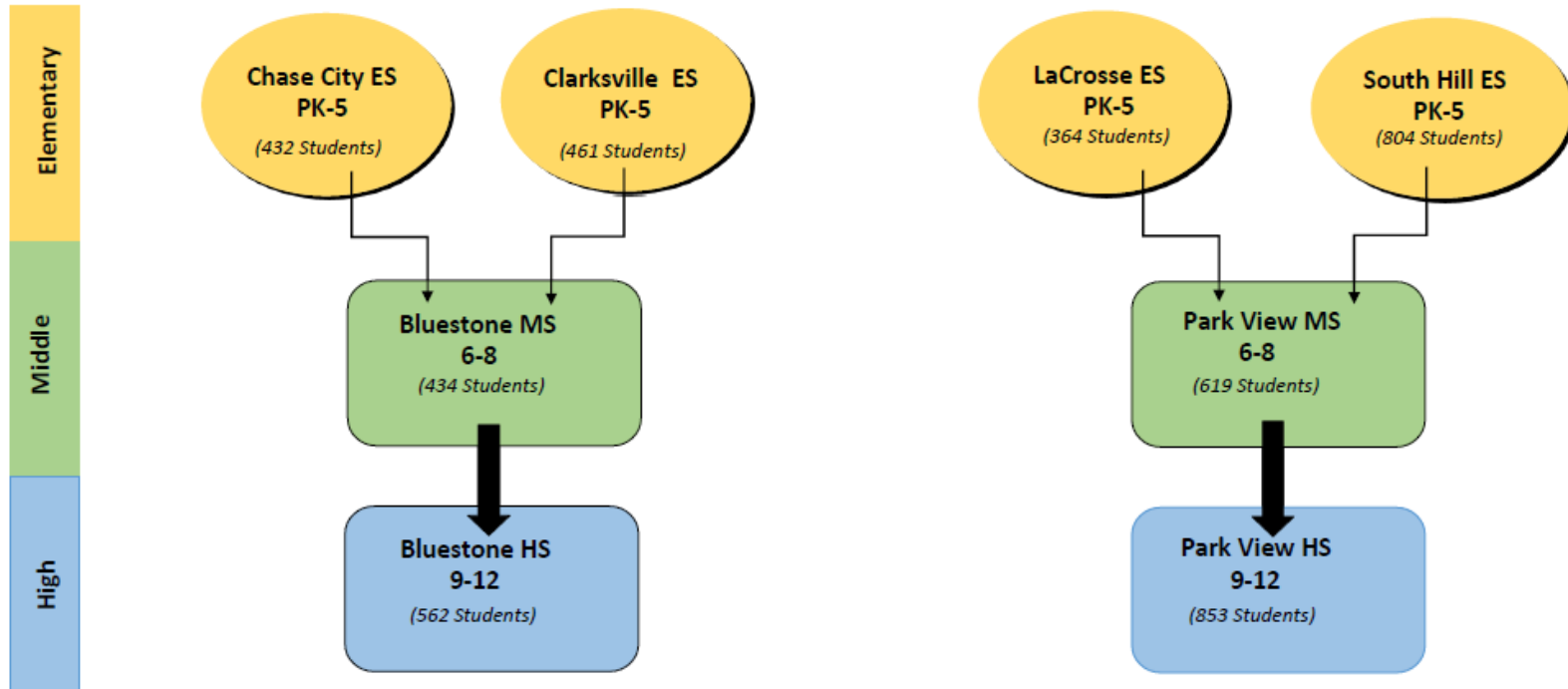
Facility Options



Baseline

Community Input Study

CR MECKLENBURG COUNTY PUBLIC SCHOOL FACILITIES 2016-17



- *Do the current secondary school facilities support the educational programs needed to prepare our students for the jobs and careers that are available in their society?*
- *What changes are necessary to provide our students and community with dynamic educational environments that provide individualized opportunities for all learners, well suited to meet the challenges of tomorrow?*

Consider size of MS & HS and possible need to re-district to distribute population



BASE LINE PROJECT

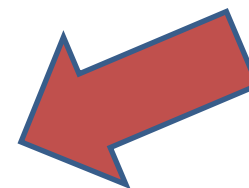
MIDDLE SCHOOLS

		Unit	Unit Cost	Subtotal
1	Existing Area			80,000
2	Selective Demolition / Hazardous Materials			80,000
3	Renovation Area			80,000
	- General Renovations			
	-Window replacement			
	-Door / hardware replacement			
	-ADA upgrades			
	- Interior finishes / casework upgrades			
	- HVAC		\$37.00	
	- Plumbing		\$9.00	
	- Electrical		\$22.00	
	- Data / Technology		\$6.00	
4	New Construction			
5	Site Work	LS		\$ 750,000
7	subtotal	SF		\$ 10,510,000
8	Scope of Work Contingency	Allowance	5%	\$ 525,500
9	Cost Escalation	Allowance	3%	\$ 315,300
10	Construction Testing / Inspection	Allowance	2.5%	\$ 262,750
11	Construction Contingency	Allowance	5%	\$ 525,500
12	subtotal			\$ 1,629,050
				Construction Cost Range
13	Construction Cost Total			\$ 12,139,050 - \$ 12,746,003
				\$151.74 \$159.33
14	Additional Soft Costs (Permits, fees, FF&E, etc.)	Allowance	15%	\$ 1,820,858 - \$ 1,911,900
				Total Project Cost Range
15	Estimated Total Project Cost			\$ 13,959,908 - \$ 14,657,903

Community Input Study

Baseline Project:

- Renovations only to existing buildings
- Extend lifespan of existing building & systems 30+ Years



Total Project Cost

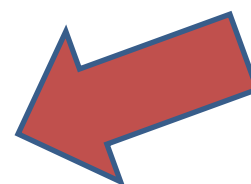
**BASE LINE PROJECT****HIGH SCHOOLS**

		Unit	Unit Cost	Subtotal
1	Existing Area			130,000
2	Hazardous Materials Abatement			130,000
3	Renovation Area			130,000
	- General Renovations		\$45.00	
	-Window replacement			
	-Door / hardware replacement			
	-ADA upgrades			
	- Interior finishes / casework upgrades			
	- HVAC		\$37.00	
	- Plumbing		\$9.00	
	- Electrical		\$22.00	
	- Data / Technology		\$6.00	
4	New Construction			
5	Site Work	LS		\$ 750,000
6	subtotal	SF		\$ 16,610,000
7	Design / Estimating Contingency	Allowance	5%	\$ 830,500
8	Cost Escalation	Allowance	2.5%	\$ 415,250
9	Construction Testing / Inspection	Allowance	3%	\$ 415,250
10	Construction Contingency	Allowance	5%	\$ 830,500
11	subtotal			\$ 2,491,500
				Construction Cost Range
12	Construction Cost Total			\$ 19,101,500 - \$ 20,056,575
				\$146.93 \$154.28
13	Additional Soft Costs (Permits, fees, FF&E, etc.)	Allowance	15%	\$ 2,865,225 - \$ 3,008,486.25
				Total Project Cost Range
14	Estimated Total Project Cost			\$ 21,966,725 - \$ 23,065,061

Community Input Study

Baseline Project:

- Renovations only to existing buildings
- Extend lifespan of existing building & systems 30+ Years



Total Project Cost

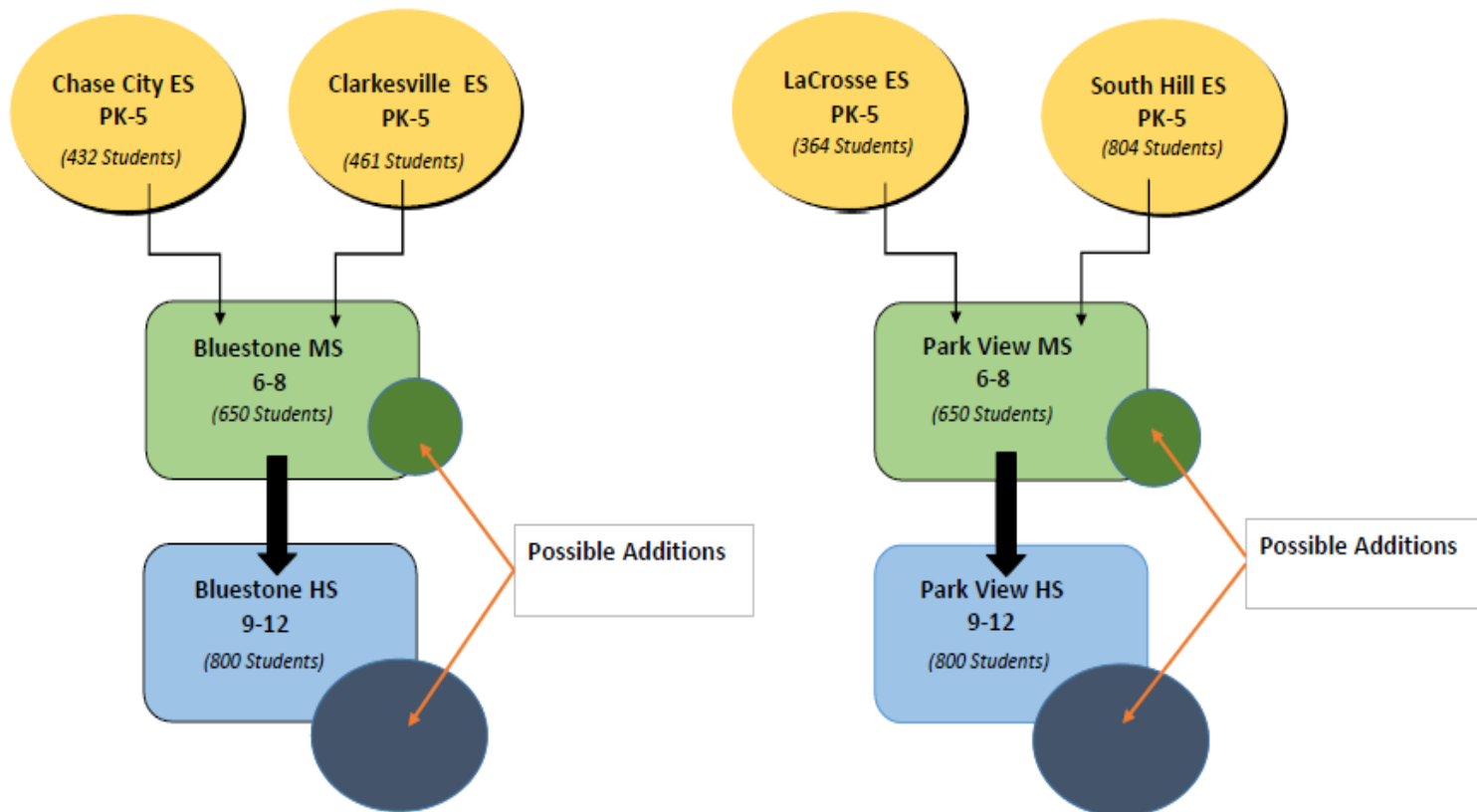
Concept 1

Community Input Study



MECKLENBURG COUNTY PUBLIC SCHOOL FACILITIES CONCEPT 1

Elementary
Middle
High



High Schools and Middle Schools:

- Baseline renovations
- Partial building demolition
- Reconfiguration of existing space
- Building additions

Consider size of MS & HS and possible need to re-district to distribute population

OPTION 1

Renovations and Additions to Existing Facility



Community Input Study

Option 1:

- Middle Schools

OPTION 1

Renovations and Additions to Existing Facility



OPTION 1

Renovations and Additions to Existing Facility



Community Input Study

Concept 1:

- High Schools

OPTION 1

Renovations and Additions to Existing Facility



**OPTION 1****HS - RENOV / ADDITIONS**

		Unit	Unit Cost	Subtotal
1 Existing Area	130,000			
2 Hazardous Materials Abatement	130,000	SF	\$3.00	\$ 390,000
Selective Building Demolition	30,000	SF	\$5.00	\$ 150,000
3 Renovation Area	110,000	SF	\$119.00	\$ 13,090,000
- General Renovations			\$45.00	
-Window replacement				
-Door / hardware replacement				
-ADA upgrades				
- Interior finishes / casework upgrades				
- HVAC			\$37.00	
- Plumbing			\$9.00	
- Electrical			\$22.00	
- Data / Technology			\$6.00	
4 New Construction	101,764		\$165.00	\$ 16,791,060
5 Site Work		LS		\$ 1,500,000
7 subtotal	211,764	SF		\$ 31,921,060
8 Scope of Work Contingency		Allowance	5%	\$ 1,596,053
9 Cost Escalation		Allowance	3%	\$ 957,632
10 Construction Testing / Inspection		Allowance	2.5%	\$ 798,027
11 Construction Contingency		Allowance	5%	\$ 1,596,053
12 subtotal				\$ 4,947,764
13 Construction Cost Total				Construction Cost Range \$ 36,868,824 - \$ 38,712,266 \$174.10 \$182.81
14 Additional Soft Costs (Permits, fees, FF&E, etc.)		Allowance	15%	\$ 5,530,324 - \$ 5,806,839.83
Estimated Total Project Cost				Total Project Cost Range \$ 42,399,148 - \$ 44,519,105

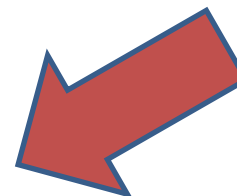
Community Input Study

Option 1:

- Middle Schools

- ✓ Baseline renovations
- ✓ Partial building demolition
- ✓ Reconfiguration of existing space
- ✓ Building additions

Total Project Cost





OPTION 1		MS - RENOV / ADDITIONS		
		Unit	Unit Cost	Subtotal

1	Existing Area	80,000		
2	Hazardous Materials Abatement	80,000	SF	\$ 240,000
	Selective Building Demolition	20,000	SF	\$ 100,000
3	Renovation Area	60,000	SF	\$ 7,140,000
	- General Renovations			\$45.00
	-Window replacement			
	-Door / hardware replacement			
	-ADA upgrades			
	- Interior finishes / casework upgrades			
	- HVAC			\$37.00
	- Plumbing			\$9.00
	- Electrical			\$22.00
	- Data / Technology			\$6.00
4	New Construction	84,313		\$165.00 \$ 13,911,645
5	Site Work		LS	\$ 1,000,000
7	subtotal	144,313	SF	\$ 22,391,645
8	Scope of Work Contingency		Allowance	5% \$ 1,119,582
9	Cost Escalation		Allowance	3% \$ 671,749
10	Construction Testing / Inspection		Allowance	2.5% \$ 559,791
11	Construction Contingency		Allowance	5% \$ 1,119,582
12	subtotal			\$ 3,470,705

Construction Cost Range				
13	Construction Cost Total			\$ 25,862,350 - \$ 27,155,467
				\$179.21 \$188.17

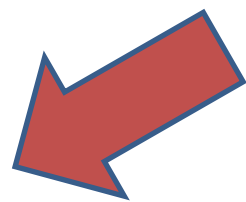
14	Additional Soft Costs (Permits, fees, FF&E, etc.)	Allowance	15%	\$ 3,879,352 - \$ 4,073,320
----	---	-----------	-----	-----------------------------

Total Project Cost Range				
15	Estimated Total Project Cost			\$ 29,741,702 - \$ 31,228,788

Community Input Study

Concept 1:

- High Schools
 - ✓ Baseline renovations
 - ✓ Partial building demolition
 - ✓ Reconfiguration of existing space
 - ✓ Building additions



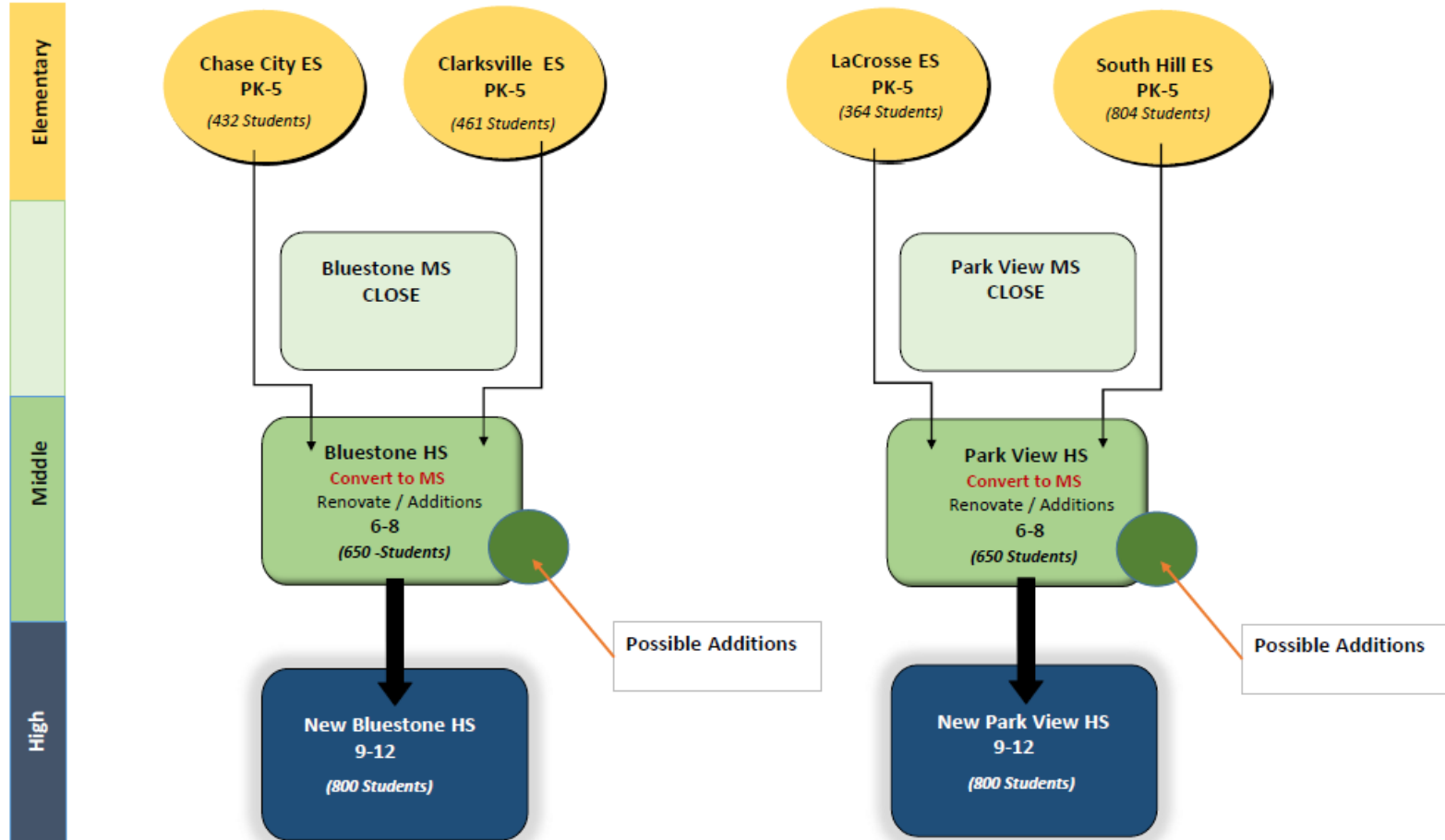
Total Project Cost

Concept 2

Community Input Study



MECKLENBURG COUNTY PUBLIC SCHOOL FACILITIES Concept 2



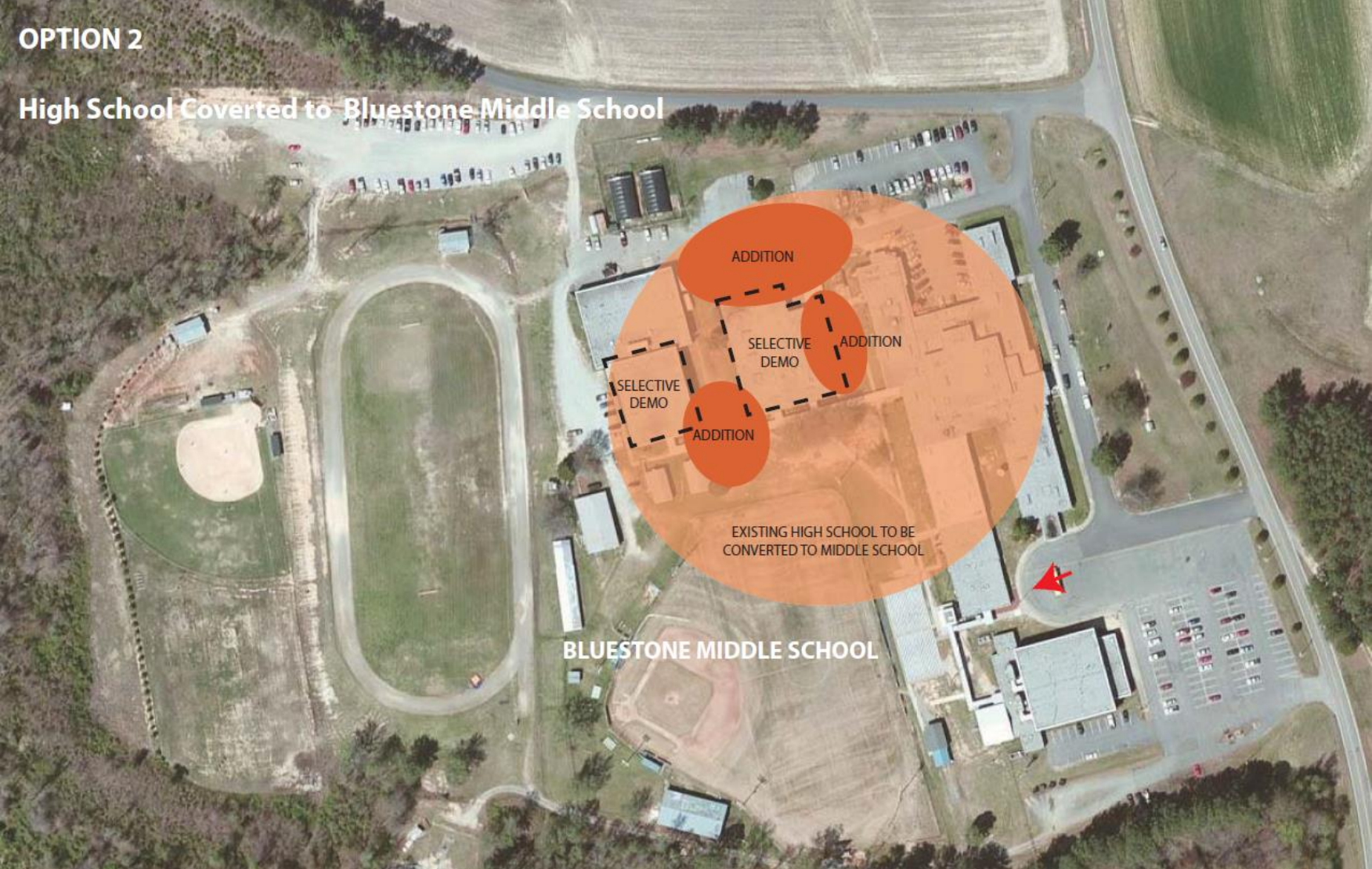
- Two (2) New High Schools
- Convert existing High Schools to Middle School Facilities
- Close (2) middle school buildings

Consider size of MS & HS and possible need to re-district to distribute population

Community Input Study

OPTION 2

High School Covered to Bluestone Middle School



Concept 2:

- Bluestone Middle School
 - ✓ Baseline renovations
 - ✓ Partial building demolition
 - ✓ Reconfiguration of existing space
 - ✓ Building additions
 - ✓ Conversion of BSHS to Grade 6-8 MS

Community Input Study

OPTION 2

New Bluestone High School on new site.



Concept 2:

- New Bluestone HS
 - ✓ New grade 9-12 HS
 - ✓ 800 Student capacity
 - ✓ New Site (TBD)

OPTION 2

CONVERT EXISTING HS TO MS

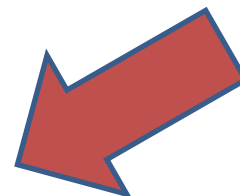
	OPTION 2		Unit	Unit Cost	Subtotal
1 Existing Area	130,000				
2 Hazardous Materials Abatement	130,000	SF	\$3.00	\$	390,000
3 Selective Building Demolition	20,000	SF	\$5.00	\$	100,000
4 Renovation Area	130,000	SF	\$119.00	\$	15,470,000
- General Renovations				\$45.00	
-Window replacement					
-Door / hardware replacement					
-ADA upgrades					
- Interior finishes / casework upgrades					
- HVAC				\$37.00	
- Plumbing				\$9.00	
- Electrical				\$22.00	
- Data / Technology				\$6.00	
5 New Construction	34,313	SF	\$165.00	\$	5,661,645
6 Site Work		LS		\$	1,000,000
7 subtotal	144,313	SF		\$	22,621,645
8 Design / Estimating Contingency		Allowance	5%	\$	1,131,082
9 Cost Escalation		Allowance	2.5%	\$	565,541
10 Construction Contingency		Allowance	3%	\$	678,649
11 subtotal				\$	2,375,273
12 Construction Cost Total					Construction Cost Range \$ 24,996,918 - \$ 26,246,764 \$173.21 \$181.87
13 Additional Soft Costs (Permits, fees, FF&E, etc.)		Allowance	15%	\$	3,749,538 - \$ 3,937,015
14 Estimated Total Project Cost					Total Project Cost Range \$28,746,455 - \$30,183,778

Community Input Study

Option 2:

- Bluestone Middle School
 - ✓ Baseline renovations
 - ✓ Partial building demolition
 - ✓ Reconfiguration of existing space
 - ✓ Building additions
 - ✓ Conversion of BSHS to Grade 6-8 MS

Total Project Cost



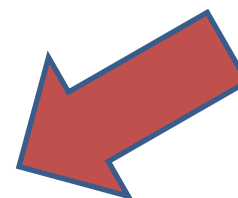
		Unit	Unit Cost	Subtotal	
1 New Construction	211,764	SF	\$165.00	\$ 34,941,060	
- General Renovations			-		
-Window replacement					
-Door / hardware replacement					
-ADA upgrades					
- Interior finishes / casework upgrades					
- HVAC			\$35.00		
- Plumbing			\$8.00		
- Fire Protection			\$4.00		
- Electrical			\$22.00		
- Data / Technology			\$6.00		
2 Site Work					
- General Sitework		LS	Cost	\$ 6,000,000	
- Athletic Stadium / Fieldhouse		LS	Cost	\$ 5,500,000	
3 subtotal	211,764	SF		\$ 46,441,060	
4 Cost Escalation			3%	\$ 1,161,027	\$ 37,495,318
5 Construction Contingency			3%	\$ 1,393,232	
6 subtotal				\$ 2,554,258	
				Construction Cost Range	
7 Construction Cost Total				\$ 48,995,318	- \$ 51,445,084
				\$231.37	\$242.94
8 Additional Soft Costs (Permits, fees, FF&E, etc.)				15%	\$ 7,349,298 - \$ 7,716,763
				Total Project Cost Range	
9 Estimated Total Project Cost				\$ 56,344,616	- \$ 59,161,847

Community Input Study

Option 2:

- Bluestone High School
 - ✓ New grade 9-12 HS
 - ✓ 800 Student capacity
 - ✓ New Site (TBD)

Total Project Cost



Community Input Study

OPTION 2

New Park View High School on current site. Old High School converted to Middle School.



Concept 2:

- Park View MS
 - ✓ Baseline renovations
 - ✓ Partial building demolition
 - ✓ Reconfiguration of existing space
 - ✓ Building additions
 - ✓ Conversion of BSHS to Grade 6-8 MS

- Park View HS
 - ✓ New Grade 9-12 HS
 - ✓ Existing site

OPTION 2

CONVERT EXISTING HS TO MS

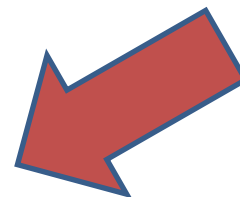
	OPTION 2		Unit	Unit Cost	Subtotal
1 Existing Area	130,000				
2 Hazardous Materials Abatement	130,000	SF	\$3.00	\$	390,000
3 Selective Building Demolition	20,000	SF	\$5.00	\$	100,000
4 Renovation Area	130,000	SF	\$119.00	\$	15,470,000
- General Renovations				\$45.00	
-Window replacement					
-Door / hardware replacement					
-ADA upgrades					
- Interior finishes / casework upgrades					
- HVAC				\$37.00	
- Plumbing				\$9.00	
- Electrical				\$22.00	
- Data / Technology				\$6.00	
5 New Construction	34,313	SF	\$165.00	\$	5,661,645
6 Site Work		LS		\$	1,000,000
7 subtotal	144,313	SF		\$	22,621,645
8 Design / Estimating Contingency		Allowance	5%	\$	1,131,082
9 Cost Escalation		Allowance	2.5%	\$	565,541
10 Construction Contingency		Allowance	3%	\$	678,649
11 subtotal				\$	2,375,273
12 Construction Cost Total					Construction Cost Range \$ 24,996,918 - \$ 26,246,764 \$173.21 \$181.87
13 Additional Soft Costs (Permits, fees, FF&E, etc.)		Allowance	15%	\$	3,749,538 - \$ 3,937,015
14 Estimated Total Project Cost					Total Project Cost Range \$28,746,455 - \$30,183,778

Community Input Study

Option 2:

- Park View Middle School
 - ✓ Baseline renovations
 - ✓ Partial building demolition
 - ✓ Reconfiguration of existing space
 - ✓ Building additions
 - ✓ Conversion of PVHS to Grade 6-8 MS

Total Project Cost



OPTION 2

NEW HIGH SCHOOL (800 Student)

		Unit	Unit Cost	Subtotal	
1 New Construction	211,764	SF	\$165.00	\$ 34,941,060	
- General Renovations			-		
-Window replacement					
-Door / hardware replacement					
-ADA upgrades					
- Interior finishes / casework upgrades					
- HVAC			\$35.00		
- Plumbing			\$8.00		
- Fire Protection			\$4.00		
- Electrical			\$22.00		
- Data / Technology			\$6.00		
2 Site Work					
- General Sitework		LS	Cost	\$ 6,000,000	
- Athletic Stadium / Fieldhouse		LS	Cost	\$ 5,500,000	
3 subtotal	211,764	SF		\$ 46,441,060	
4 Cost Escalation			3%	\$ 1,161,027	\$ 37,495,318
5 Construction Contingency			3%	\$ 1,393,232	
6 subtotal				\$ 2,554,258	
Construction Cost Range					
7 Construction Cost Total				\$ 48,995,318 - \$ 51,445,084	
				\$231.37	\$242.94
8 Additional Soft Costs (Permits, fees, FF&E, etc.)			15%	\$ 7,349,298 - \$ 7,716,763	
Total Project Cost Range					
9 Estimated Total Project Cost				\$ 56,344,616 - \$ 59,161,847	

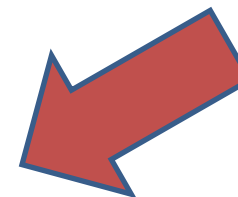
Community Input Study

Option 2:

- Park View High School

- ✓ New grade 9-12 HS
- ✓ 800 Student capacity
- ✓ Existing Site

Total Project Cost

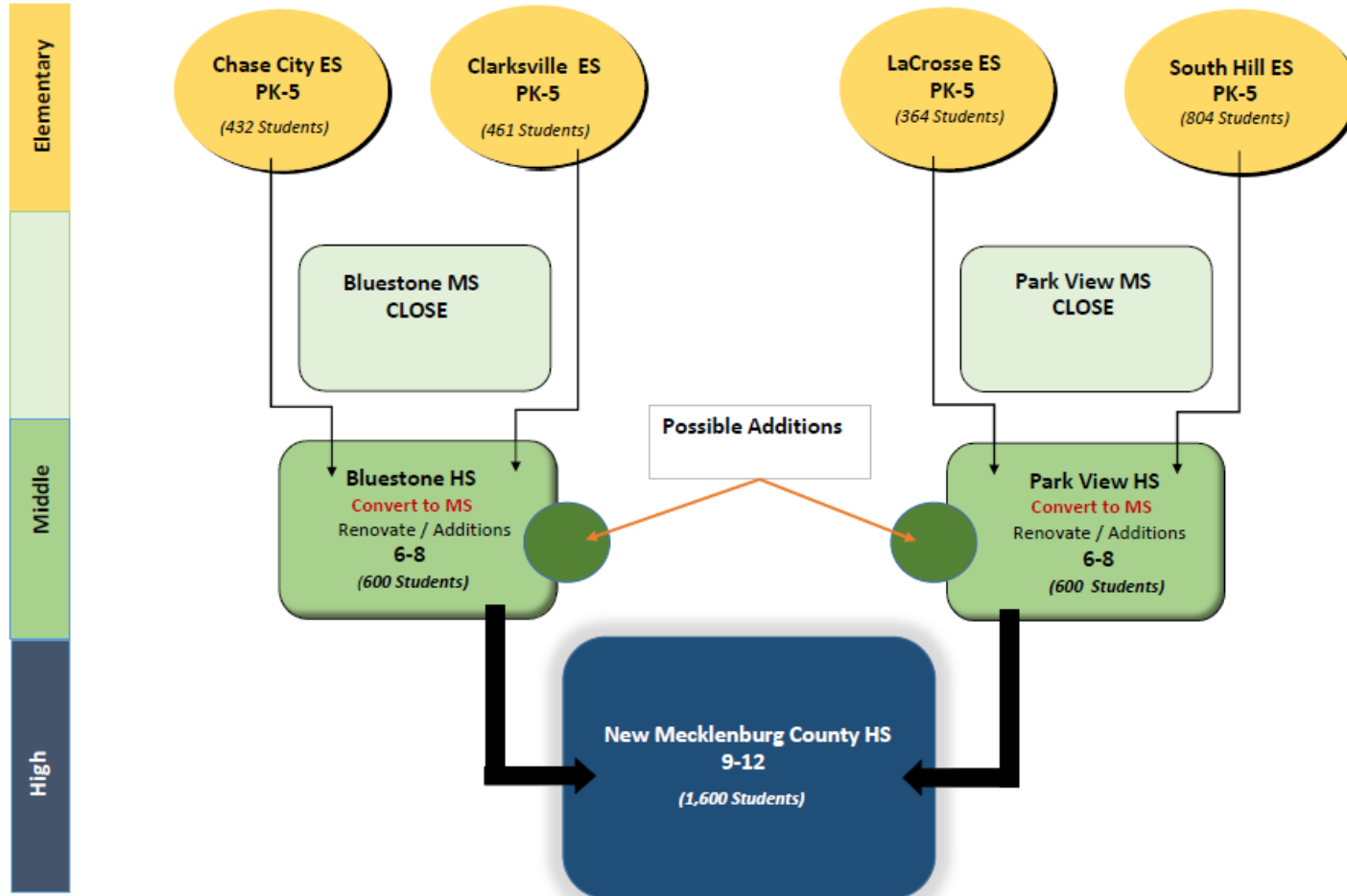


Concept 3

Community Input Study



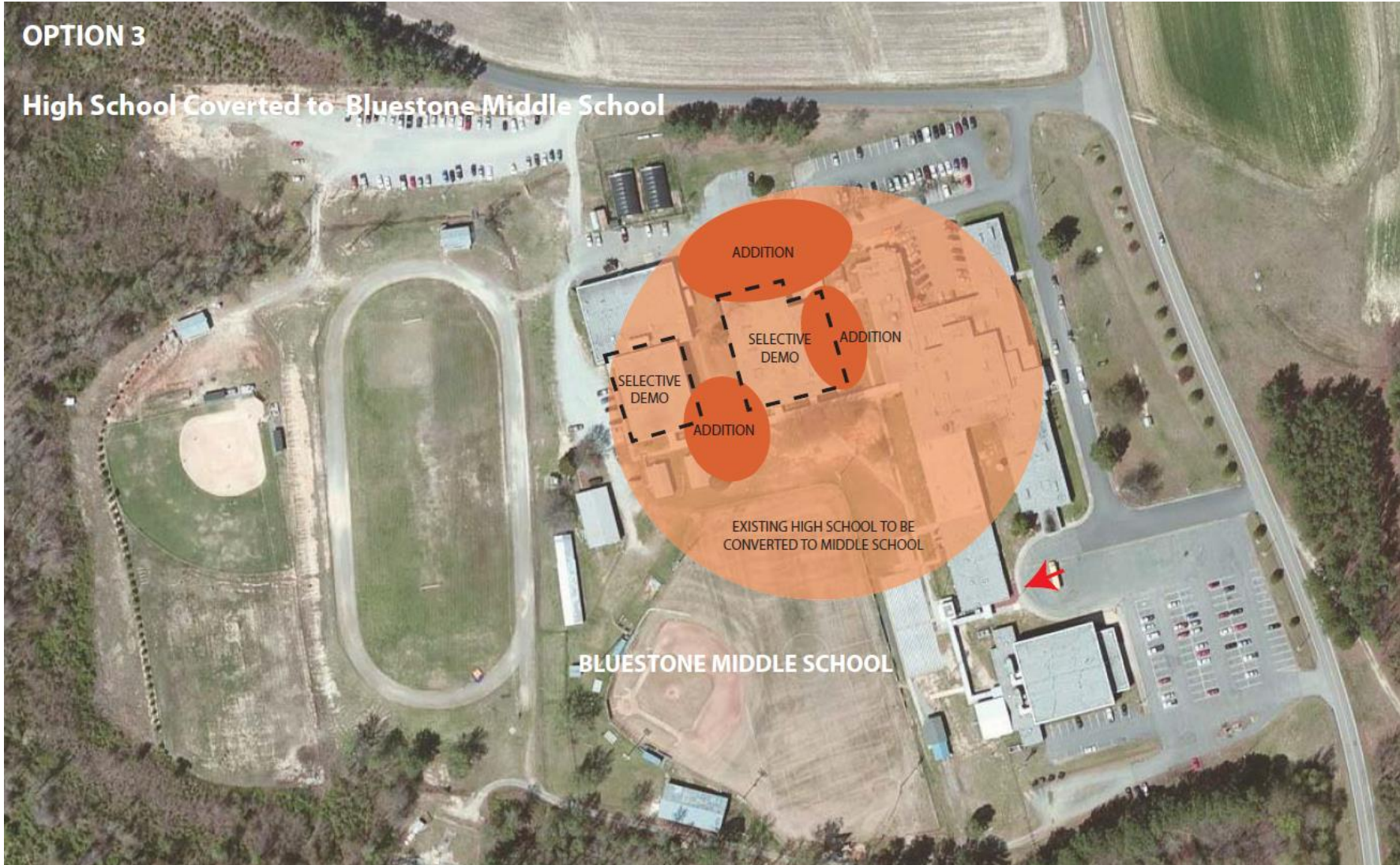
MECKLENBURG COUNTY PUBLIC SCHOOL FACILITIES Concept 3



- ✓ New Consolidated Single High School
- ✓ Convert existing High Schools to Middle School Facilities
- ✓ Close (2) middle school buildings

Consider size of MS & HS and possible need to re-district to distribute population

Community Input Study



Concept 3:

- Convert BSHS to Middle School
 - ✓ Baseline renovations
 - ✓ Partial building demolition
 - ✓ Reconfiguration of existing space
 - ✓ Building additions
 - ✓ Conversion of existing High School to grade 6-8 Middle School

Community Input Study

OPTION 3

High School Covered to Park View Middle School



Concept 3:

- Convert PVHS to Middle School
 - ✓ Baseline renovations
 - ✓ Partial building demolition
 - ✓ Reconfiguration of existing space
 - ✓ Building additions
 - ✓ Conversion of existing High School to grade 6-8 Middle School

**OPTION 3****CONVERT EXISTING HS TO MS**

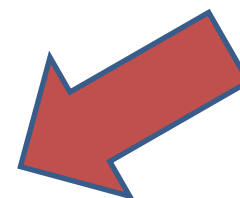
	OPTION 2	Unit	Unit Cost	Subtotal
1 Existing Area	130,000			
2 Hazardous Materials Abatement	130,000	SF	\$3.00	\$ 390,000
3 Selective Building Demolition	20,000	SF	\$5.00	\$ 100,000
4 Renovation Area	130,000	SF	\$119.00	\$ 15,470,000
- General Renovations			\$45.00	
-Window replacement				
-Door / hardware replacement				
-ADA upgrades				
- Interior finishes / casework upgrades				
- HVAC			\$37.00	
- Plumbing			\$9.00	
- Electrical			\$22.00	
- Data / Technology			\$6.00	
5 New Construction	34,313	SF	\$165.00	\$ 5,661,645
6 Site Work		LS		\$ 1,000,000
7 subtotal	144,313	SF		\$ 22,621,645
8 Design / Estimating Contingency		Allowance	5%	\$ 1,131,082
9 Cost Escalation		Allowance	2.5%	\$ 565,541
10 Construction Contingency		Allowance	3%	\$ 678,649
11 subtotal				\$ 2,375,273
12 Construction Cost Total				Construction Cost Range \$ 24,996,918 - \$ 26,246,764 \$173.21 \$181.87
13 Additional Soft Costs (Permits, fees, FF&E, etc.)		Allowance	15%	\$ 3,749,538 - \$ 3,937,015
14 Estimated Total Project Cost				Total Project Cost Range \$28,746,455 - \$30,183,778

Community Input Study

Option 3:

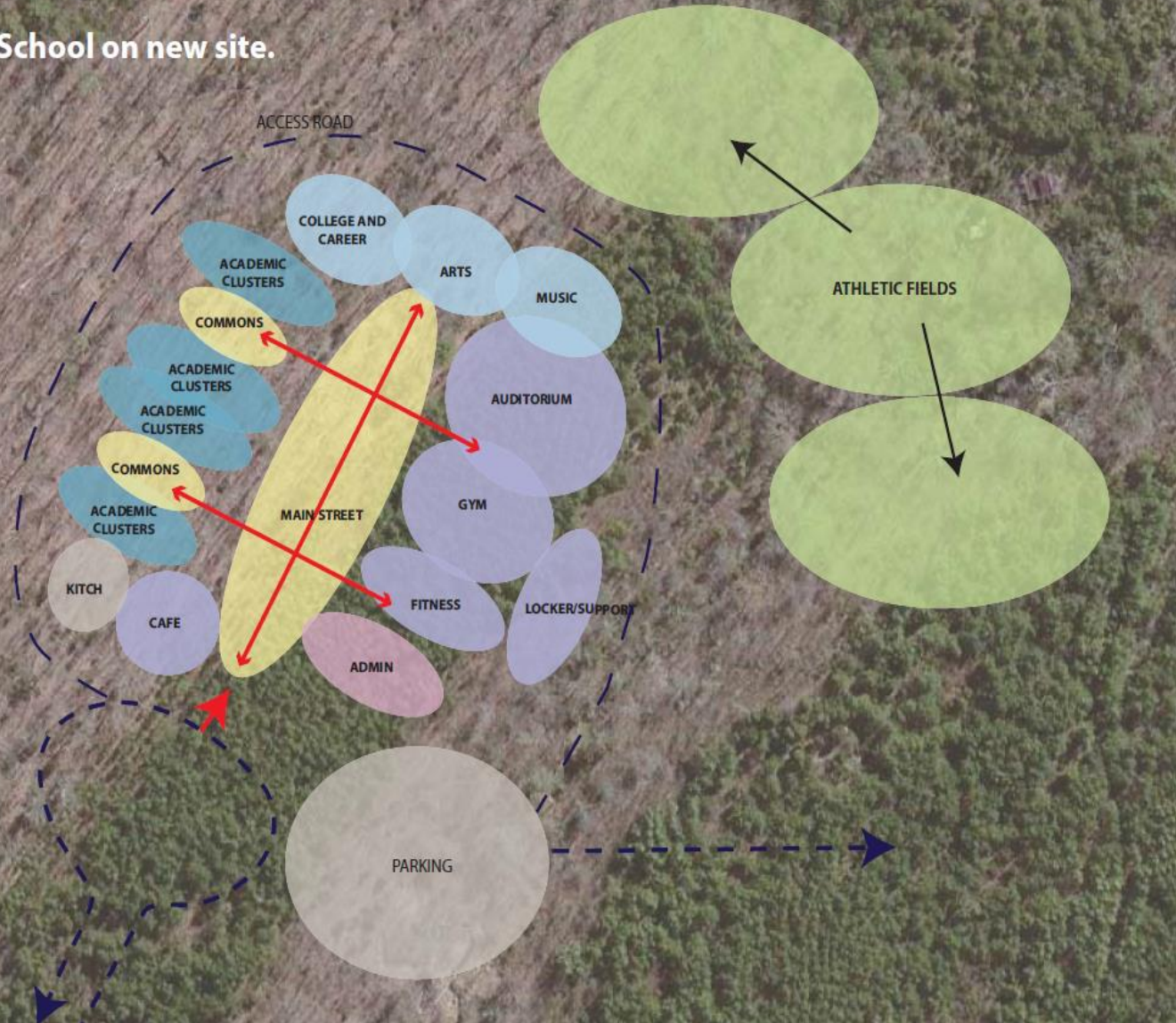
- Bluestone Middle School
- Park View Middle School
 - ✓ Baseline renovations
 - ✓ Partial building demolition
 - ✓ Reconfiguration of existing space
 - ✓ Building additions
 - ✓ Conversion of High Schools HS to Grade 6-8 Middle Schools

Total Project Cost



OPTION 3

One combined New High School on new site.



Community Input Study

Concept 3:

- New Combined High School

- ✓ (1) New Combined High School
- ✓ 1,600 Students
- ✓ New Site (TBD)

NEW HIGH SCHOOL (1,600 Student)

OPTION 3

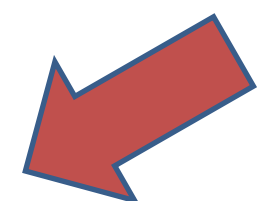
Unit Unit Cost Subtotal

1 New Construction	291,294	SF	\$165.00	\$	48,063,510
- General Renovations					-
- Window replacement					
- Door / hardware replacement					
- ADA upgrades					
- Interior finishes / casework upgrades					
- HVAC			\$35.00		
- Plumbing			\$8.00		
- Fire Protection			\$4.00		
- Electrical			\$22.00		
- Data / Technology			\$6.00		
2 Site Work					
- General Sitework		LS	Cost	\$	8,000,000
- Athletic Stadium / Fieldhouse		LS	Cost	\$	5,500,000
3 subtotal	291,294	SF		\$	61,563,510
4 Cost Escalation			3%	\$	1,539,088
5 Construction Contingency			3%	\$	1,846,905
6 subtotal				\$	3,385,993
Construction Cost Range					
7 Construction Cost Total				\$	64,949,503 - \$ 68,196,978
					\$222.97 \$234.12
8 Additional Soft Costs (Permits, fees, FF&E, etc.)			15%	\$	9,742,425 - \$ 10,229,547
Total Project Cost Range					
9 Estimated Total Project Cost				\$	74,691,929 - \$ 78,426,525

Community Input Study

Concept 3:

- New Combined High School
 - ✓ (1) New Combined High School
 - ✓ 1,600 Students
 - ✓ New Site (TBD)

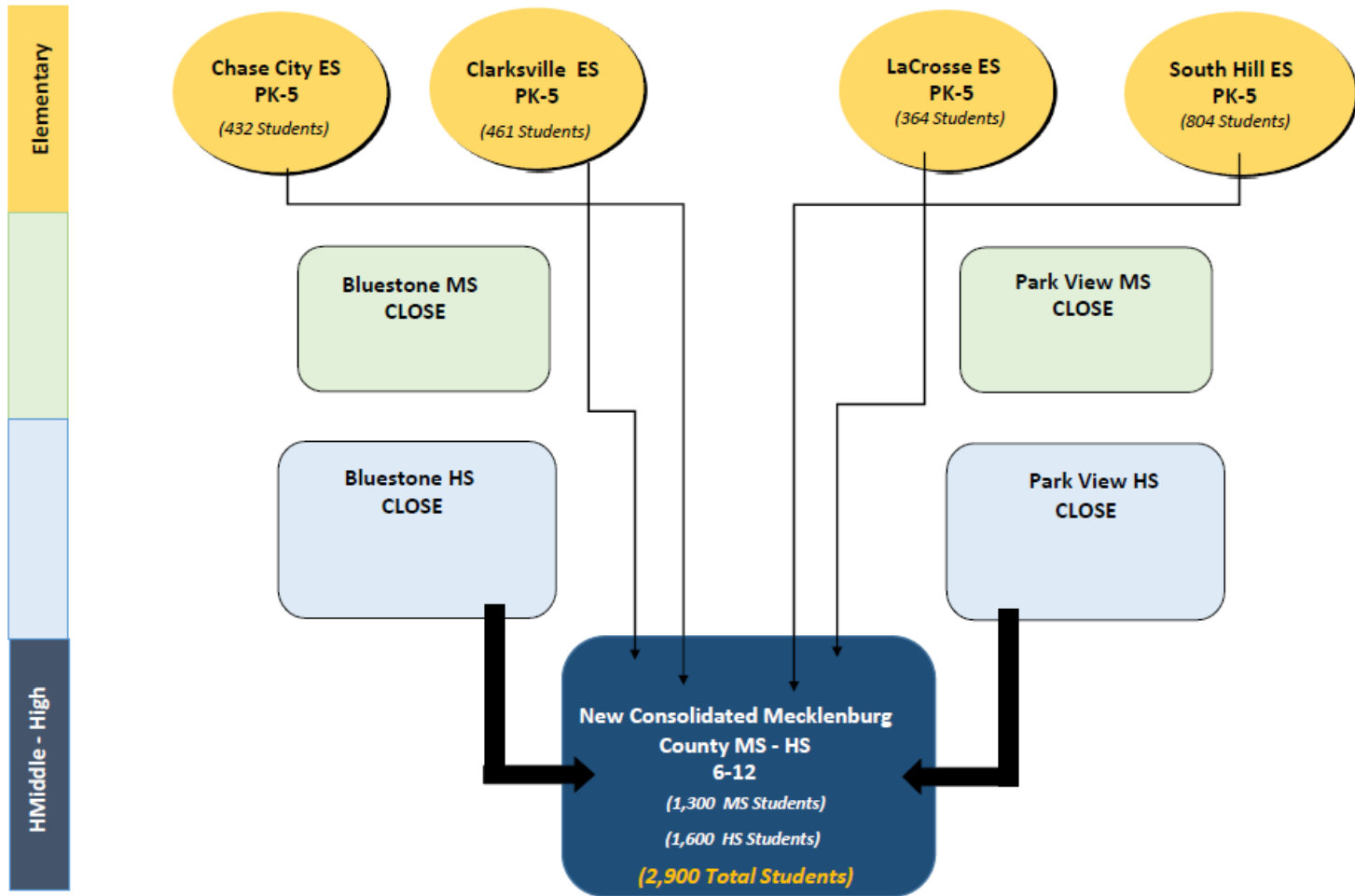


Total Project Cost

Concept 4



MECKLENBURG COUNTY PUBLIC SCHOOL FACILITIES Concept 4



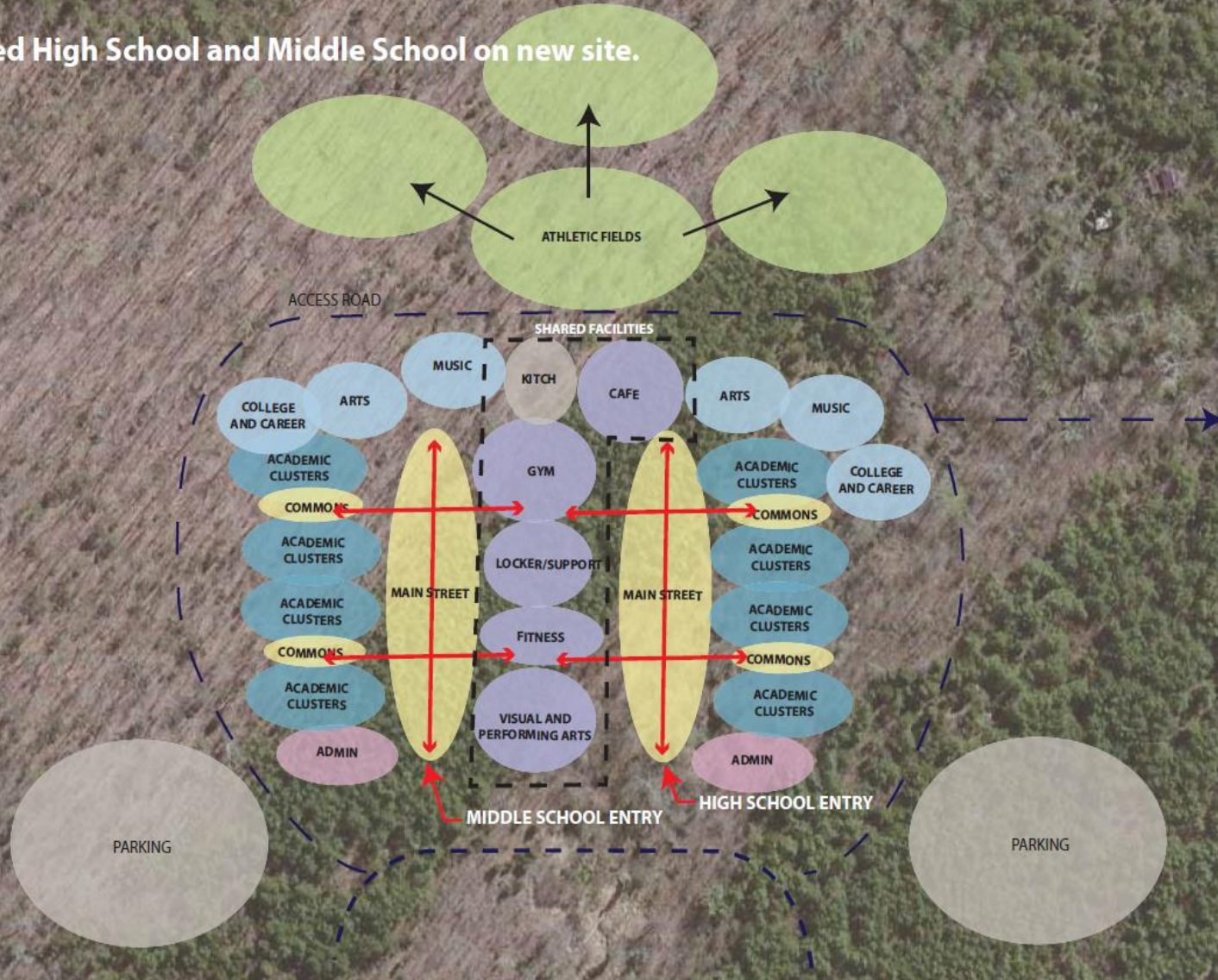
Community Input Study

- ✓ Construction of a single Consolidated Grade 6-12 High School – Middle School
- ✓ New Site (TBD)
- ✓ Shared Facilities
- ✓ Separate HS and MS Academic Areas
- ✓ Close (4) existing buildings

Consider total number of students and design of school for separation of MS & HS, while allowing for shared facilities possible need to re-district to distribute population

OPTION 4

New combined High School and Middle School on new site.



Community Input Study

Concept 4:

- ✓ Construction of a single Consolidated Grade 6-12 High School – Middle School
- ✓ New Site (TBD)
- ✓ Shared Facilities
- ✓ Separate HS and MS Academic Areas
- ✓ Close (4) existing buildings

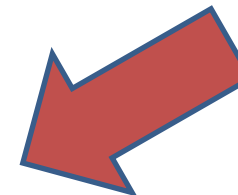
OPTION 4		NEW HS - MS (2,900 Students)			
		Unit	Unit Cost	Subtotal	
1	New Construction	426,038	SF	\$165.00	\$ 70,296,270
	- General Renovations			-	
	-Window replacement				
	-Door / hardware replacement				
	-ADA upgrades				
	- Interior finishes / casework upgrades				
	- HVAC			\$35.00	
	- Plumbing			\$8.00	
	- Fire Protection			\$4.00	
	- Electrical			\$22.00	
	- Data / Technology			\$6.00	
2	Site Work				
	- General Sitework		LS	Cost	\$ 12,000,000
	- Athletic Stadium / Fieldhouse		LS	Cost	\$ 5,500,000
3	subtotal	426,038	SF		\$ 87,796,270
4	Cost Escalation			3%	\$ 2,194,907
5	Construction Contingency			3%	\$ 2,633,888
6	subtotal				\$ 4,828,795
7	Construction Cost Total				\$ 92,625,065 - \$ 97,256,318
					\$217.41 \$228.28
8	Additional Soft Costs (Permits, fees, FF&E, etc.)			15%	\$ 13,893,760 - \$ 14,588,448
9	Estimated Total Project Cost				\$ 106,518,825 - \$ 111,844,766

Community Input Study

Concept 4:

- ✓ Construction of a single Consolidated Grade 6-12 High School – Middle School
- ✓ New Site (TBD)
- ✓ Shared Facilities
- ✓ Separate HS and MS Academic Areas
- ✓ Close (4) existing buildings

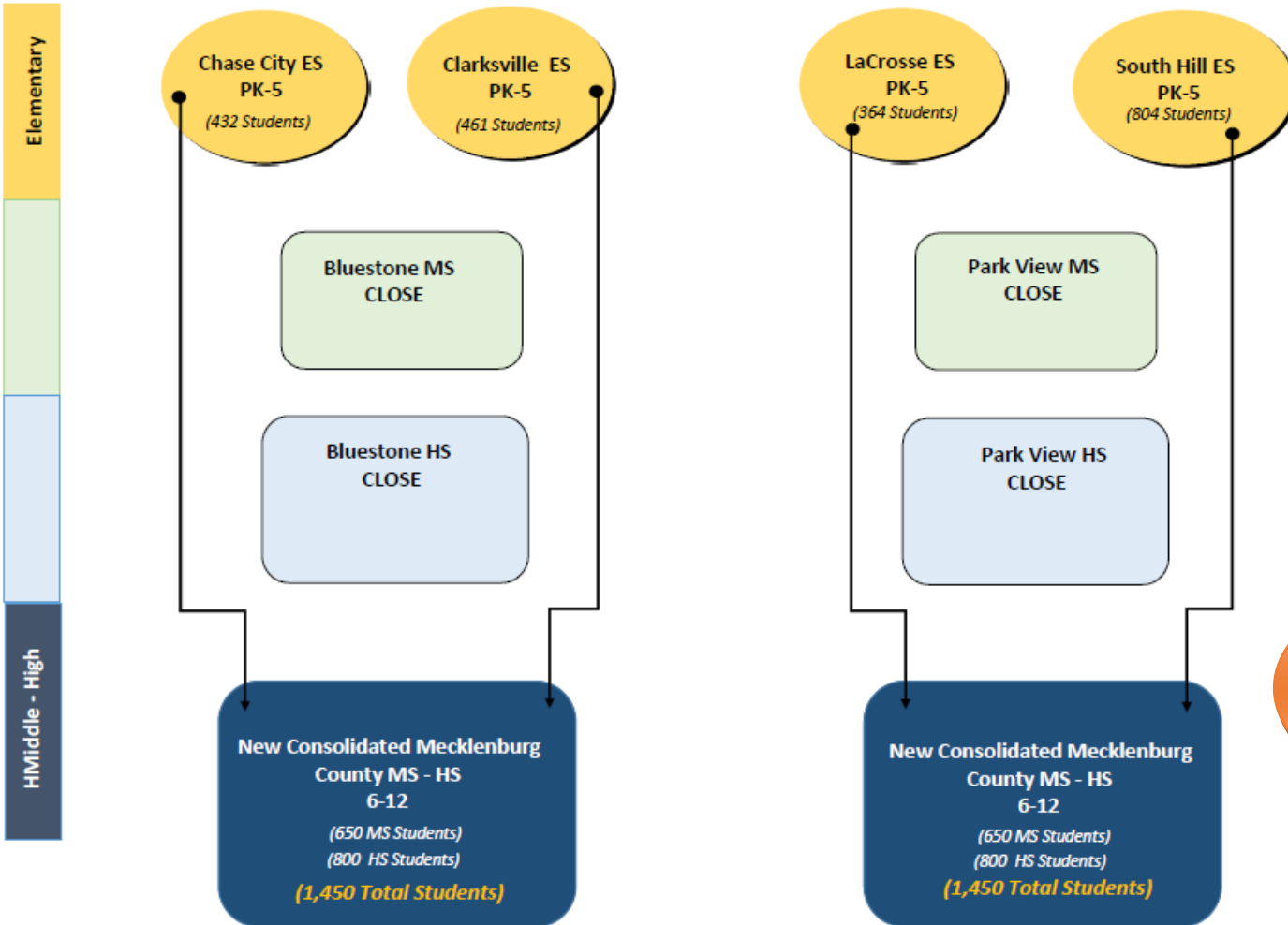
Total Project Cost



Concept 5

CR

MECKLENBURG COUNTY PUBLIC SCHOOL FACILITIES Concept 5



Community Input Study

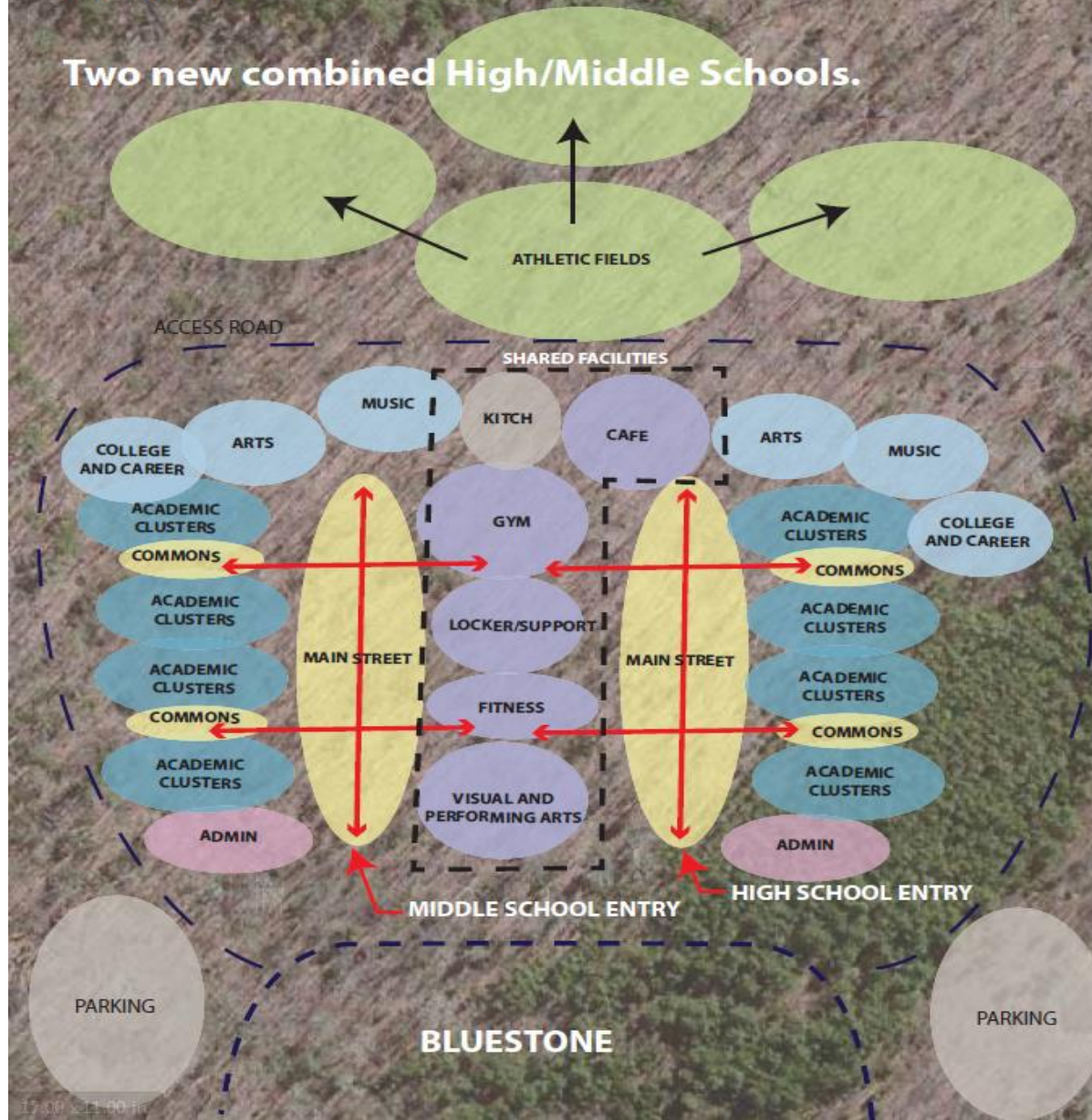
- ✓ Construction of (2) two Consolidated Grade 6-12 High School – Middle Schools
- ✓ New Site for Bluestone (TBD)
- ✓ Existing PVHS site
- ✓ Shared Facilities
- ✓ Separate HS and MS Academic Areas
- ✓ Close (4) existing buildings

Consider disposition of existing buildings

Consider size of MS & HS and possible need to re-district to distribute population

OPTION 5

Two new combined High/Middle Schools.



Community Input Study

Concept 5:

Bluestone HS

- ✓ Construction of (2) two Consolidated Grade 6-12 High School – Middle Schools
- ✓ New Site (TBD)
- ✓ Shared Facilities
- ✓ Separate HS and MS Academic Areas
- ✓ Close (4) existing buildings

OPTION 5

New combined Park View Middle School and High School.



Community Input Study

Concept 5:

- ✓ Construction of (2) two Consolidated Grade 6-12 High School – Middle Schools
- ✓ Existing PVHS site
- ✓ Shared Facilities
- ✓ Separate HS and MS Academic Areas
- ✓ Close (4) existing buildings

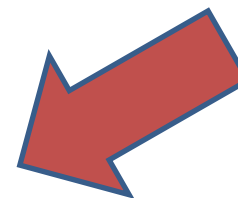
		NEW HS - MS (1,450 Students)				
OPTION 5		Unit	Unit Cost	Subtotal		
1	New Construction	327,806	SF	\$165.00	\$	54,087,990
	- General Renovations			-		
	-Window replacement					
	-Door / hardware replacement					
	-ADA upgrades					
	- Interior finishes / casework upgrades					
	- HVAC			\$35.00		
	- Plumbing			\$8.00		
	- Fire Protection			\$4.00		
	- Electrical			\$22.00		
	- Data / Technology			\$6.00		
2	Site Work					
	- General Sitework		LS	Cost	\$	10,000,000
	- Athletic Stadium / Fieldhouse		LS	Cost	\$	6,000,000
3	subtotal	327,806	SF		\$	70,087,990
4	Cost Escalation			3%	\$	1,752,200
5	Construction Contingency			3%	\$	2,102,640
6	subtotal				\$	3,854,839
7	Construction Cost Total				\$	73,942,829 - \$ 77,639,971
					\$225.57	\$236.85
8	Additional Soft Costs (Permits, fees, FF&E, etc.)			15%	\$	11,091,424 - \$ 11,645,996
9	Estimated Total Project Cost				\$	85,034,254 - \$ 89,285,967

Community Input Study

Concept 5:

- ✓ Construction of (2) two Consolidated Grade 6-12 High School – Middle Schools
- ✓ New Site for Bluestone (TBD)
- ✓ Existing PVHS site
- ✓ Shared Facilities
- ✓ Separate HS and MS Academic Areas
- ✓ Close (4) existing buildings

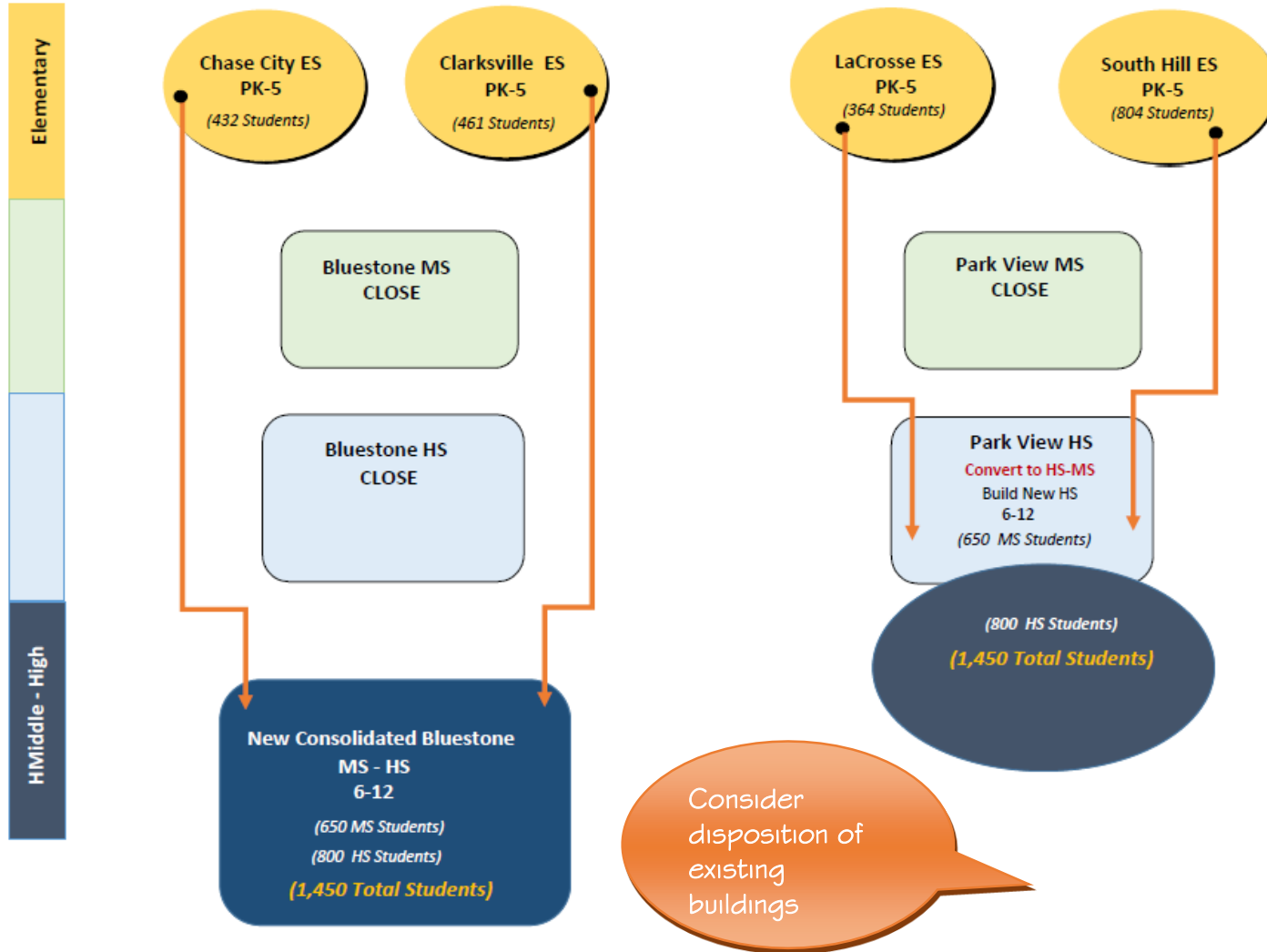
Total Project Cost



Concept 6



MECKLENBURG COUNTY PUBLIC SCHOOL FACILITIES Concept 6



Community Input Study

Concept 6:

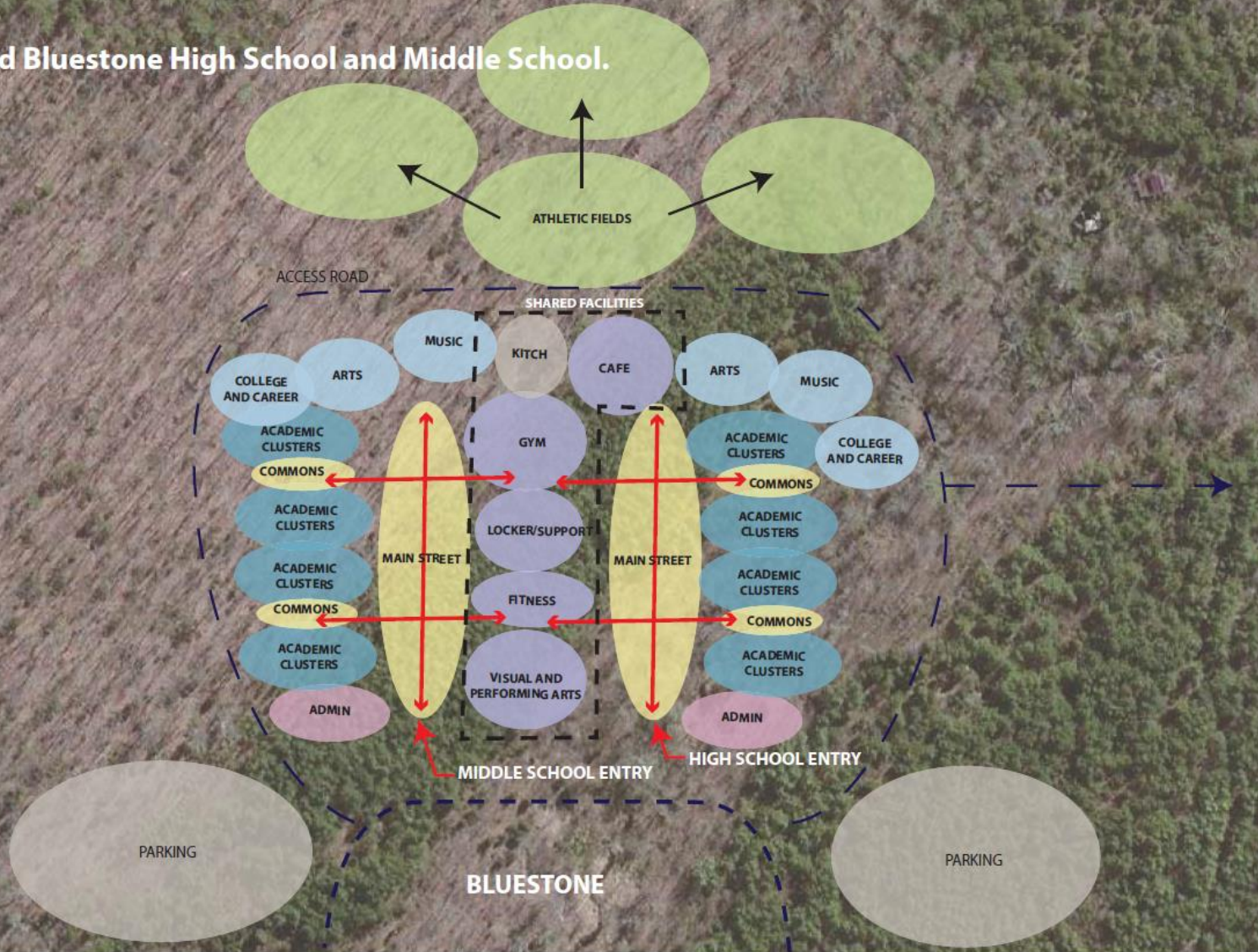
- ✓ Construction of Consolidated Grade 6-12 Bluestone HS-MS
- ✓ New Site for Bluestone (TBD)
- ✓ Construction of New Park View HS on existing site
- ✓ Shared Facilities
- ✓ Separate HS and MS Academic Areas
- ✓ Convert Park View HS to MS
- ✓ Close (3) existing buildings

Consider total number of students and design of school for separation of MS & HS, while allowing for shared facilities possible need to re-district to distribute population

Consider size of MS & HS and possible need to re-district to distribute population

OPTION 6

New combined Bluestone High School and Middle School.



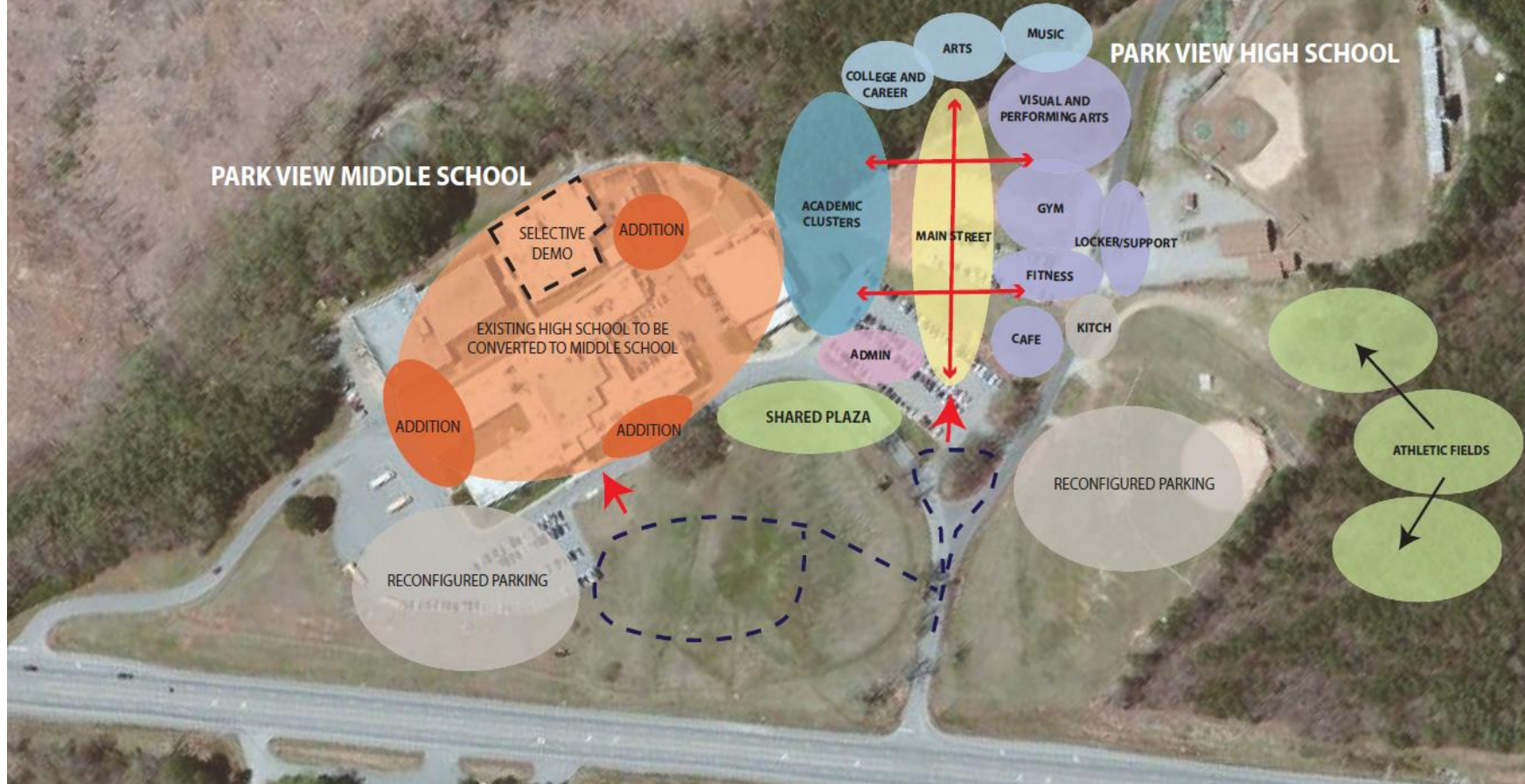
Community Input Study

Concept 6:

- ✓ Construction of Consolidated Grade 6-12 Bluestone HS-MS
- ✓ New Site for Bluestone (TBD)
- ✓ Construction of New Park View HS on existing site
- ✓ Shared Facilities
- ✓ Separate HS and MS Academic Areas
- ✓ Convert Park View HS to MS
- ✓ Close (3) existing buildings

OPTION 6

Old High School converted to Park View Middle School. New Park View High School connected to Middle School.



Community Input Study

Concept 6:

- ✓ Construction of Consolidated Grade 6-12 Bluestone HS-MS
- ✓ New Site for Bluestone (TBD)
- ✓ Construction of New Park View HS on existing site
- ✓ Shared Facilities
- ✓ Separate HS and MS Academic Areas
- ✓ Convert Park View HS to MS
- ✓ Close (3) existing buildings

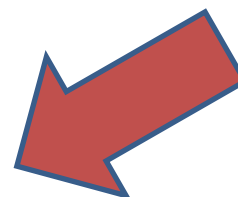
		Unit	Unit Cost	Subtotal	
1 New Construction	327,806	SF	\$165.00	\$ 54,087,990	
- General Renovations			-		
-Window replacement					
-Door / hardware replacement					
-ADA upgrades					
- Interior finishes / casework upgrades					
- HVAC			\$35.00		
- Plumbing			\$8.00		
- Fire Protection			\$4.00		
- Electrical			\$22.00		
- Data / Technology			\$6.00		
2 Site Work					
- General Sitework		LS	Cost	\$ 10,000,000	
- Athletic Stadium / Fieldhouse		LS	Cost	\$ 6,000,000	
3 subtotal	327,806	SF		\$ 70,087,990	
4 Cost Escalation			3%	\$ 1,752,200	\$ 57,942,829
5 Construction Contingency			3%	\$ 2,102,640	
6 subtotal				\$ 3,854,839	
				Construction Cost Range	
7 Construction Cost Total				\$ 73,942,829 - \$ 77,639,971	
				\$225.57	\$236.85
8 Additional Soft Costs (Permits, fees, FF&E, etc.)			15%	\$ 11,091,424 - \$ 11,645,996	
				Total Project Cost Range	
9 Estimated Total Project Cost				\$ 85,034,254 - \$ 89,285,967	

Community Input Study

Concept 6:

- ✓ Construction of Consolidated Grade 6-12 Bluestone HS-MS
- ✓ New Site for Bluestone (TBD)
- ✓ Construction of New Park View HS on existing site
- ✓ Shared Facilities
- ✓ Separate HS and MS Academic Areas
- ✓ Convert Park View HS to MS
- ✓ Close (3) existing buildings

Total Project Cost



Community Input Study

		SF/ Student			Construction Cost / SF (Building & Site)	Construction Cost / SF (Building Only)						
New High School - VA Average 2010 - 2016		165			\$215.18	\$175.38						
New Middle School - VA Average 2010 - 2016		170			\$211.23	\$179.90						
					CONSTRUCTION COSTS							
Option	Description	SF	Design Capacity	SF/ Student	Construction Cost Range		Construction Cost / SF (Building & Site)		Construction Cost / SF (Building Only)		Total Project Cost	
Baseline	Renovations only to existing buildings											
Bluestone MS	Comprehensive Renovations	80,000	650	123	\$12,139,050 - \$12,746,003	\$151.74	\$159.33	\$140.91	\$147.96	\$13,959,908 - \$14,657,903		
Bluestone HS	Comprehensive Renovations	130,000	800	162	\$19,101,500 - \$20,056,575	\$146.93	\$154.28	\$140.30	\$147.32	\$21,966,725 - \$23,065,061		
Park View MS	Comprehensive Renovations	80,000	650	123	\$12,139,050 - \$12,746,003	\$151.74	\$159.33	\$140.91	\$147.96	\$13,959,908 - \$14,657,903		
Park View HS	Comprehensive Renovations	130,000	800	162	\$19,101,500 - \$20,056,575	\$146.93	\$154.28	\$140.30	\$147.32	\$21,966,725 - \$23,065,061		
BASELINE TOTAL					\$62,481,100 - \$65,605,155					\$71,853,265 - \$75,445,928		
Option 1	Renovations & Additions											
Bluestone MS	Renovations & Additions	144,313	650	179	\$25,862,350 - \$27,155,467	\$179.21	\$188.17	\$171.21	\$179.77	\$29,741,702 - \$31,228,788		
Bluestone HS	Renovations & Additions	211,764	800	209	\$36,868,824 - \$38,712,266	\$174.10	\$182.81	\$165.92	\$174.22	\$42,399,148 - \$44,519,105		
Park View MS	Renovations & Additions	144,313	650	179	\$25,862,350 - \$27,155,467	\$179.21	\$188.17	\$171.21	\$179.77	\$29,741,702 - \$31,228,788		
Park View HS	Renovations & Additions	211,764	800	209	\$36,868,824 - \$38,712,266	\$174.10	\$182.81	\$165.92	\$174.22	\$42,399,148 - \$44,519,105		
OPTION 1 TOTAL					\$125,462,349 - \$131,735,466					\$144,281,701 - \$151,495,786		
Option 2	(2) New HS / Convert HS to MS											
Bluestone MS	Convert Exist Bluestone HS to MS	144,313	650	179	\$24,996,918 - \$26,246,764	\$173.21	\$181.87	\$165.56	\$173.83	\$28,746,455 - \$30,183,778		
Bluestone HS	New High School	211,764	800	209	\$48,995,318 - \$51,445,084	\$231.37	\$242.94	\$174.08	\$182.78	\$56,344,616 - \$59,161,847		
Park View MS	Convert Exist Park View HS to MS	144,313	650	179	\$24,996,918 - \$26,246,764	\$173.21	\$181.87	\$165.56	\$173.83	\$28,746,455 - \$30,183,778		
Park View HS	New High School	211,764	800	209	\$48,995,318 - \$51,445,084	\$231.37	\$242.94	\$174.08	\$182.78	\$56,344,616 - \$59,161,847		
OPTION 2 TOTAL					\$147,984,472 - \$155,383,696					\$170,182,143 - \$178,691,250		
Option 3	(1) Consolidated HS / Convert HS to MS											
Bluestone MS	Convert Exist Bluestone HS to MS	144,313	650	179	\$24,996,918 - \$26,246,764	\$173.21	\$181.87	\$165.56	\$173.83	\$28,746,455 - \$30,183,778		
Park View MS	Convert Exist Park View HS to MS	144,313	650	179	\$24,996,918 - \$26,246,764	\$173.21	\$181.87	\$165.56	\$173.83	\$28,746,455 - \$30,183,778		
New HS	Construct New Consolidated HS	291,294	1,600	157	\$64,949,503 - \$68,196,978	\$222.97	\$234.12			\$74,691,929 - \$78,426,525		
OPTION 3 TOTAL					\$114,943,339 - \$120,690,505					\$132,184,839 - \$138,794,081		
Option 4	(1) Consolidated HS-MS											
New MS / HS	Construct New Consolidated HS-MS	426,038	2,900	129	\$92,625,065 - \$97,256,318	\$217.41	\$228.28	\$174.08	\$182.78	\$106,518,825 - \$111,844,766		
OPTION 4 TOTAL					\$92,625,065 - \$97,256,318					\$106,518,825 - \$111,844,766		
Option 5	(2) Consolidated HS-MS											
New MS / HS	Construct New Consolidated HS-MS	327,806	1,450	180	\$73,942,829 - \$77,639,971	\$225.57	\$236.85	\$174.08	\$182.78	\$85,034,254 - \$89,285,967		
New MS / HS	Construct New Consolidated HS-MS	327,806	1,450	180	\$73,942,829 - \$77,639,971	\$225.57	\$236.85	\$174.08	\$182.78	\$85,034,254 - \$89,285,967		
OPTION 5 TOTAL					\$147,885,659 - \$155,279,942					\$170,068,508 - \$178,571,933		
Option 6	New Consolidated HS-MS New PVHS / Convert HS to MS											
New MS / HS	Construct New Consolidated HS-MS	327,806	1,450	180	\$73,942,829 - \$77,639,971	\$225.57	\$236.85	\$174.08	\$182.78	\$85,034,254 - \$89,285,967		
New PVHS	New PVHS - Convert PVHS to MS	327,806	1,450	180	\$61,840,830 - \$64,932,872	\$188.65	\$198.08	\$179.61	\$188.59	\$71,116,955 - \$74,672,803		
OPTION 6 TOTAL					\$135,783,660 - \$142,572,843					\$156,151,209 - \$163,958,769		

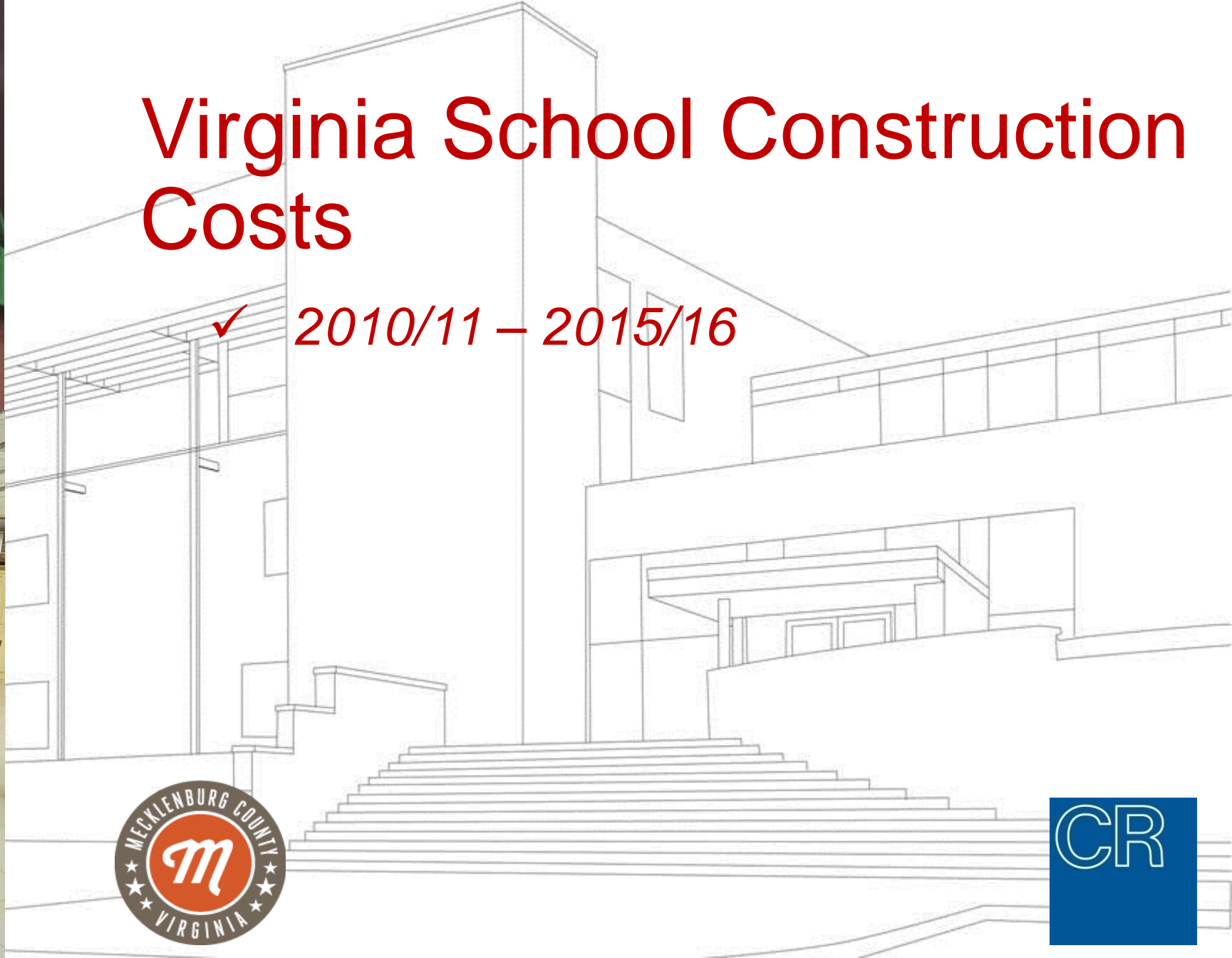
Community Input Study

ANNUAL COSTS				30 Year Life-Cycle Cost				TOTAL 30 Year Life-Cycle Cost
Operations & Maintenance	Utilities	Transp.	Staffing	Operations & Maintenance	Utilities	Transp.	Staffing	
\$2.40	\$1.40							
\$2.50	\$1.50							
\$2.65	\$1.65							
\$212,000	\$132,000			\$6,360,000	\$3,960,000			
\$344,500	\$214,500			\$10,335,000	\$6,435,000			
\$212,000	\$132,000			\$6,360,000	\$3,960,000			
\$344,500	\$214,500			\$10,335,000	\$6,435,000			
\$1,113,000	\$693,000	\$0	\$0	\$33,390,000	\$20,790,000	\$0	\$0	\$126,033,265 - \$129,625,928
\$360,783	\$216,470			\$10,823,475	\$6,494,085			
\$529,410	\$317,646			\$15,882,300	\$9,529,380			
\$360,783	\$216,470			\$10,823,475	\$6,494,085			
\$529,410	\$317,646			\$15,882,300	\$9,529,380			
\$1,780,385	\$1,068,231	\$0	\$0	\$53,411,550	\$32,046,930	\$0	\$0	\$229,740,181 - \$236,954,266
\$360,783	\$216,470			\$10,823,475	\$6,494,085			
\$508,234	\$296,470			\$15,247,008	\$8,894,088			
\$360,783	\$216,470			\$10,823,475	\$6,494,085			
\$508,234	\$296,470			\$15,247,008	\$8,894,088			
\$1,738,032	\$1,025,878	\$59,934	\$0	\$52,140,966	\$30,776,346	\$1,798,020	\$0	\$254,897,475 - \$263,406,582
\$360,783	\$216,470			\$10,823,475	\$6,494,085			
\$360,783	\$216,470			\$10,823,475	\$6,494,085			
\$699,106	\$407,812			\$20,973,168	\$12,234,348			
\$1,420,671	\$840,751	\$340,108	-\$170,000	\$42,620,118	\$25,222,518	\$10,203,240	-\$5,100,000	\$205,130,715 - \$211,739,957
\$1,022,491	\$596,453			\$30,674,736	\$17,893,596			
\$1,022,491	\$596,453	\$364,146	-\$255,000	\$30,674,736	\$17,893,596	\$10,924,380	-\$7,650,000	\$158,361,537 - \$163,687,478
\$786,734	\$458,928			\$23,602,032	\$13,767,852			
\$786,734	\$458,928			\$23,602,032	\$13,767,852			
\$1,573,469	\$917,857	\$129,278	-\$170,000	\$47,204,064	\$27,535,704	\$3,878,340	-\$5,100,000	\$243,586,616 - \$252,090,041
\$786,734	\$458,928			\$23,602,032	\$13,767,852			
\$819,515	\$491,709			\$24,585,450	\$14,751,270			
\$1,606,249	\$950,637	\$129,278	-\$170,000	\$48,187,482	\$28,519,122	\$3,878,340	-\$5,100,000	\$231,636,153 - \$239,443,713



Virginia School Construction Costs

✓ 2010/11 – 2015/16



Community Input Study

PK-12 Enrollment History 20010/11 - 2015/16						
Year	2010-11	2011-12	2012-13	2013-14	2014-15	(2/9/2016) 2015-16
K	360	333	330	335	304	312
1	352	361	329	340	338	331
2	372	346	350	324	331	322
3	373	378	374	360	322	323
4	356	377	370	337	360	357
5	365	357	354	370	336	332
6	381	365	382	359	372	375
7	370	388	381	360	357	360
8	410	380	396	371	359	364
9	413	448	410	401	389	390
10	397	384	380	382	369	358
11	310	370	346	385	372	374
12	360	336	330	355	372	382
Sub-total	4819	4823	4732	4679	4581	4580
Pre-K	193	173	196	193	176	183
Total	5012	4996	4928	4872	4757	4763

Cohort Survival Ratios (%)									
Year	2011-12	2012-13	2013-14	2014-15	2015-16	Mean last 5 years	Mean Last 4 years	Mean Last 3 years	
B-K	95.97%	104.10%	110.56%	97.12%	106.12%	102.77%	104.48%	104.60%	
K to 1	100.28%	98.80%	103.03%	100.90%	108.88%	102.38%	102.90%	104.27%	
1 to 2	98.30%	96.95%	98.48%	97.35%	95.27%	97.27%	97.01%	97.03%	
2 to 3	101.61%	108.09%	102.86%	99.38%	97.58%	101.91%	101.98%	99.94%	
3 to 4	101.07%	97.88%	90.11%	100.00%	110.87%	99.99%	99.72%	100.33%	
4 to 5	100.28%	93.90%	100.00%	99.70%	92.22%	97.22%	96.46%	97.31%	
5 to 6	100.00%	107.00%	101.41%	100.54%	111.61%	104.11%	105.14%	104.52%	
6 to 7	101.84%	104.38%	94.24%	99.44%	96.77%	99.34%	98.71%	96.82%	
7 to 8	102.70%	102.06%	97.38%	99.72%	101.96%	100.76%	100.28%	99.69%	
8 to 9	109.27%	107.89%	101.26%	104.85%	108.64%	106.38%	105.66%	104.92%	
9 to 10	92.98%	84.82%	93.17%	92.02%	92.03%	91.00%	90.51%	92.41%	
10 to 11	93.20%	90.10%	101.32%	97.38%	101.36%	96.67%	97.54%	100.02%	
11 to 12	108.39%	89.19%	102.60%	96.62%	102.69%	99.90%	97.78%	100.64%	

Community Input Study

K-12 Enrollment Forecast

(Utilizing 5 year mean for 2016-17 through 2020-21 and 3 year mean for 2021-22 through 2025-26)

Year	2016-17	2017-18	2018-19	2019-20	2020-21
K	274	301	290	296	296
1	319	281	308	297	322
2	322	311	273	300	289
3	328	328	317	278	306
4	323	328	328	317	278
5	347	314	319	319	308
6	346	361	327	332	332
7	373	343	359	325	330
8	363	375	346	362	327
9	387	386	399	368	385
10	355	352	351	363	335
11	346	343	341	339	351
12	374	346	343	340	339
Total	4,457	4,370	4,301	4,236	4,198
Year	2021-22	2022-23	2023-24	2024-25	2025-26
K	299	300	300	300	300
1	309	312	313	313	313
2	313	299	303	304	304
3	288	313	299	303	304
4	307	289	314	300	303
5	271	298	282	305	292
6	322	283	312	294	319
7	321	311	274	302	285
8	329	320	310	273	301
9	343	345	336	326	287
10	356	317	319	311	301
11	335	356	317	319	311
12	354	337	358	319	321
Total	4,146	4,082	4,037	3,969	3,940

Note: Any cohort survival forecast longer than five years will be based on children not yet born. Accordingly, it is not recommended to attempt to forecast enrollment beyond five years using the cohort survival method.

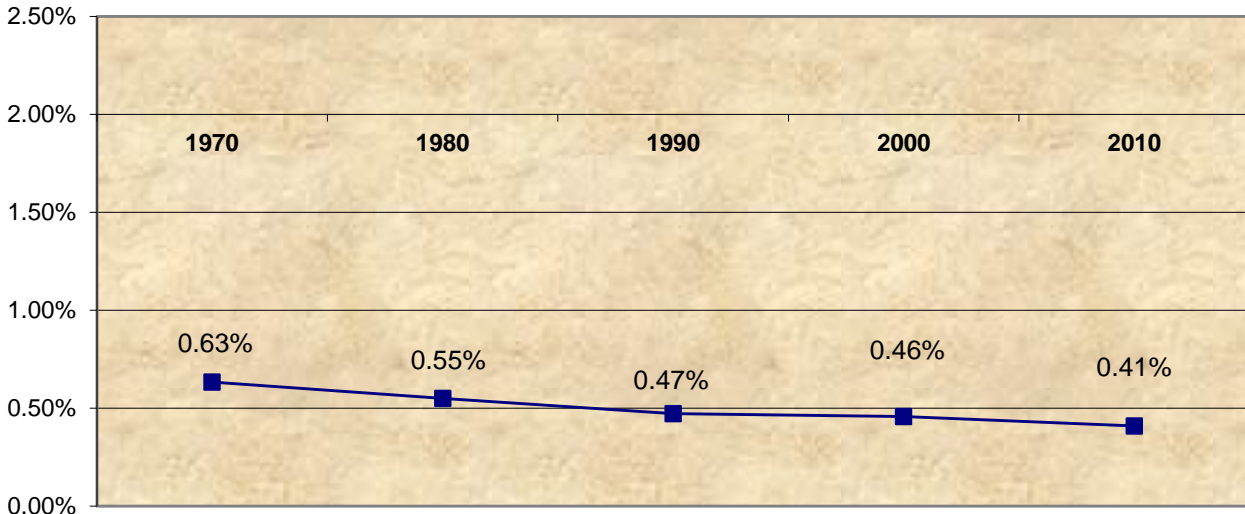
Community Input Study

HISTORICAL TREND - PROJECTION METHOD						Projections	
	1980	1990	2000	2010	2020	2030	
County Total Population	29,444	29,241	32,380	32,727	32,877	32,968	
increase from previous decade		-0.7%	10.7%	1.1%	0.5%	0.3%	
Division Total K-12 Students	5,785	5,073	4,997	4,816	4,603	4,385	
increase/decrease from prev. decade				-3.6%	-4.4%	-4.7%	
% Students per Population	19.6%	17.3%	15.4%	14.7%	14.0%	13.3%	
	4 Decade Average		16.8%		Trending decline		
	2 Decade Average		15.1%				

HISTORICAL TREND - PROJECTION METHOD						Projections	
	1980	1990	2000	2010	2020	2030	
County Total Population	29,444	29,241	32,380	32,727	32,877	32,968	
increase from previous decade		-0.7%	10.7%	1.1%	0.5%	0.3%	
Division Total K-12 Students	5,785	5,073	4,997	4,816	4,833	4,846	
increase/decrease from prev. decade				-3.6%	0.4%	0.3%	
% Students per Population	19.6%	17.3%	15.4%	14.7%	14.7%	14.7%	
	4 Decade Average		16.8%		2010 Average		
	2 Decade Average		15.1%				

Community Input Study

**Mecklenburg County Population
as percentage of
Virginia Population**



County / State Population Ratio								
Percentage of Virginia population that represents Mecklenburg County population						2000 US Census		
		1970	1980	1990	2000	2010		
Virginia		4,648,494	5,346,818	6,187,358	7,079,048	8,001,024		
Mecklenburg County Population		29,426	29,444	29,241	32,380	32,727		
% of State Pop.		0.63%	0.55%	0.47%	0.46%	0.41%	0.50%	
	increase/decrease		-0.082%	-0.078%	-0.015%	-0.048%	0.43%	
							4 Decade Average	
							2 Decade Average	



Community Input Study

Virginia Department of Education Annual Cost Data

Virginia Department of Education Annual Cost Data				2010/11 - 2015-16
New High Schools Built in Virginia				
Year	Avg. Building Cost / SF	Avg. Total Project Cost / SF		Average Cost / Pupil
2015-16	NO DATA AVAILABLE			
2014-15	\$175.65	\$218.47	163	\$35,690.00
2013-14	\$184.91	\$217.71	158	\$34,309.00
2012-13	\$180.18	\$218.69	166	\$36,279.00
2011-12	\$167.86	\$210.64	175	\$36,961.00
2010-11	\$168.28	\$210.39	164	\$34,410.00
5 Yr. Avg.	\$175.38	\$215.18	165	\$35,529.80



Community Input Study

Virginia Department of Education Annual Cost Data

Virginia Department of Education Annual Cost Data New Middle Schools Built in Virginia 2010/11 - 2015-16

Year	Avg. Building Cost / SF	Avg. Total Project Cost / SF		Average Cost / Pupil
2015-16	\$198.11	\$239.80	151	\$36,256.00
2014-15	\$179.12	\$211.41	190	\$40,121.00
2013-14		NO NEW MS BUILT		
2012-13	\$162.48	\$182.49	168	\$30,728.00
2011-12		NO NEW MS BUILT		
2010-11		NO NEW MS BUILT		
6 Yr. Avg.	\$179.90	\$211.23	170	\$35,701.67

“Education is the most powerful
weapon which you can use to
change the world.”

- *Nelson Mandela*

Discussion

