



### **ARCHITECTS**



#### **MEP ENGINEERS**



### **CM SERVICES**



### **CIVIL ENGINEERS**



- **01** WELCOME AND OVERVIEW
- **02** PROJECT GOALS and UPDATE
  PREVIOUS MASTER PLAN SYNOPSIS
- **03** BREAKOUT SESSIONS

**ENROLLMENT SCHOOL SIZE** 

**COST ANALYSES** 

UPDATED DESIGNS AND PHASING

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# **Elementary School Study**

# **Option Development Phase – through September**

Option Selection – Fall 2016 (October)

# Non-local Funding

- PA Department of Economic Development Grants (1)
  - July 1, 2016 Grant Approved \$3.8 Million
- PA Department of Education Project Justification
  - Approved \$2-\$3 Million
- (1) Completion date under grant agreement changed to June 30, 2019.
- Allows for greater flexibility for construction and LEED certification periods.



# <u>Updated Preliminary Design Options – Ground Rules</u>

- Current building size.
- Current student enrollment.
- Incorporate community, zoning, land development, administration and board committee comments.





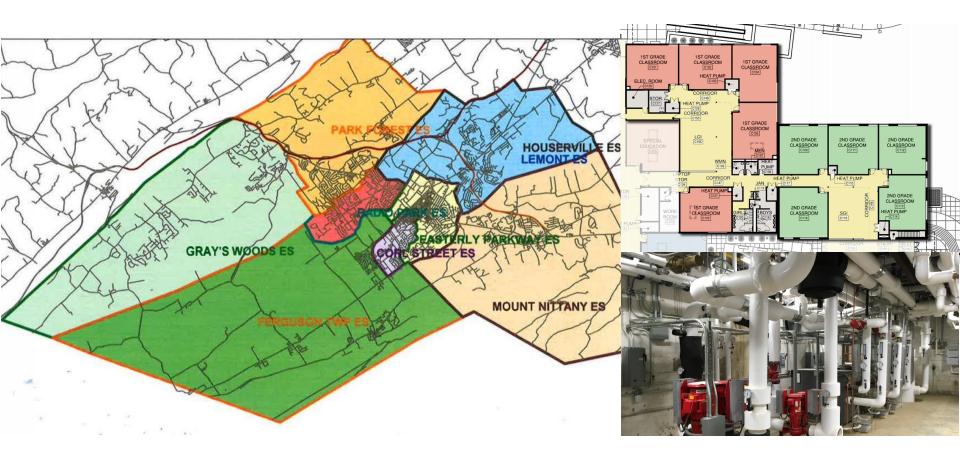


Radio Park ES Houserville ES Corl ES

The design team continues to explore additional building size, configuration options and attendance area analysis pending results of demographic study and municipal planning efforts.







- 1. Comparable Buildings and Programs in Elementary Schools
- 2. Sustainability and energy efficiency
- 3. Program Flexibility
- 4. Long term attendance boundary stability





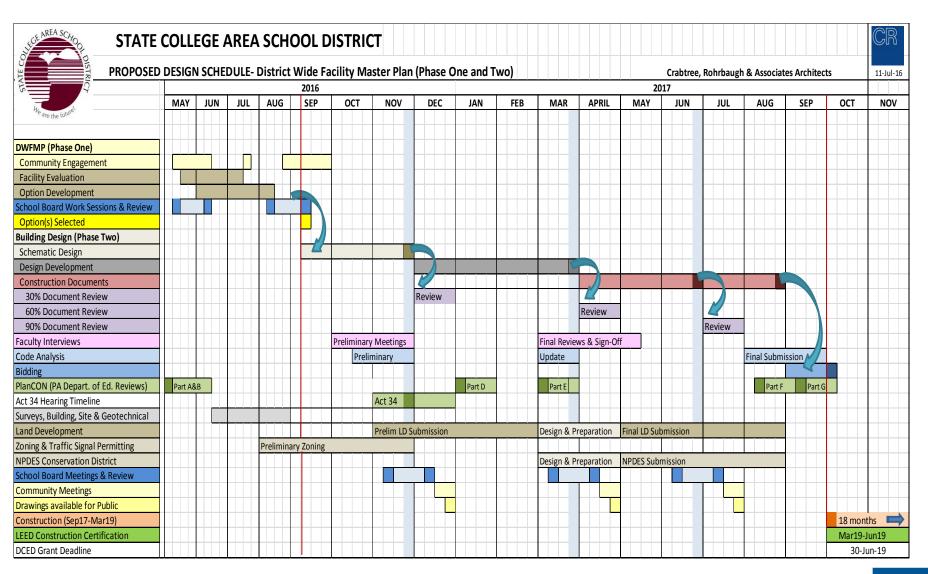


# **COMMUNITY INPUT**

- Forums held in May and June.
- Tonight review:
  - Review progress to date
  - Previous Master Plan Synopsis
  - Student Enrollment Discussion
  - Cost Analysis
  - Proposed Design and Phasing Update







\*Preliminary DWFMP Schedule to identify general approach, it is anticipated this schedule will evolve with the integration of the School Board, Administration, and Design Team..





# **BOARD DECISION INFORMED BY:**

- Guiding Principles From the Strategic Plan
  - Culture of Trust, Relationships, and Collaboration
  - Responsive Teaching and Learning
  - High Expectations for All
  - Welcoming and Safe Climate for Learning and Work
- Community Involvement
- Demographic Analysis
  - Population Growth, Enrollment Boundaries, Elementary Capacity
- Capital Cost of the Projects
- Long Term Operation and Maintenance Costs



# School/location making blocess desired a series of the ser Vesign spaci Neighborhoor Neighborhoor

**Other.....** Design mechanical

Demographic study

**Community Input** 

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UPDATED DESIGNS AND PHASING

# 1999 Elementary School Master Plan

	1999	
	Option A	Option B
Radio Park	Renovations and Additions	Renovations and Additions
Park Forest	Renovations and Additions	Renovations and Additions
Matternville*	Close	Close
Gray's Woods*	Build New	Build New
Easterly Parkway*	Renovations and Additions	Renovations and Additions
Fairmount*	Repurpose	Repurpose
Houserville	Combine with Lemont; Reno/ Adds	Renovations and Additions
Lemont	Close	Renovations and Additions
Corl Street Ferguson Twp.	Close	Renovations and Additions Renovations and Additions
New School	Build a new school to combine FT and CS	NA NA
Panorama Village	Combine with Boalsburg; Reno/ Adds	Renovations and Additions
Boalsburg	Close	Renovations and Additions

<sup>\*</sup>Completed as part of the plan adoption

# District Wide Master Plan (Elementary portion)

	2001	
	Primary Option	Option B
Radio Park	Renovations and Additions	
Park Forest*	Renovations and Additions	Build New; same site*
Matternville	Sell	
Gray's Woods	Complete	
Easterly	Complete	
Parkway		
<u>Fairmount</u>	Complete	
Houserville	Combine with Lemont; Reno/	
	Add	
Lemont	Sell	
Corl Street	Renovations and Additions	
Ferguson Twp.	Renovations and Additions	
Panorama	Combine with Boalsburg;	
Village	Reno/Add	
Boalsburg	Sell	

<sup>\*</sup>Completed as part of the plan adoption

### **2009 District Wide Facilities Master Plan (Elementary portion)**

	2009	
		Alternate
Radio Park	Renovations and Additions	
Park Forest	Complete	
<u>Matternville</u>	Complete	
Gray's	Addition*	
Woods*		
Easterly	Complete	
Parkway		
<u>Fairmount</u>	Complete	
Houserville	Combine with Lemont; Reno/	Combine with Lemont; New
	Add	costruction
Lemont	Repurpose	
Corl Street	Renovations and Additions	New Construction
Ferguson	Renovations and Additions*	New Construction
Twp.*		
Panorama	Combine with Boalsburg; Reno/	Combine with Boalsburg; New
Village*	Add	Construction*
Boalsburg	Repurpose	

<sup>\*</sup>Completed as part of the plan adoption

# **2014 District Wide Facilities Master Plan Update (Elementary portion)**

	2014	
	Option A	Option B
Radio Park	Renovations and Additions	Renovations and Additions
Park Forest	Complete	Complete
Matternville	Complete	Complete
Gray's Woods	Complete	Complete
Easterly Parkway	Complete	Complete
Fairmount	Administration	Administration
Houserville	Renovations and Additions	Combine with Lemont; Reno Add or New
Lemont	Renovations and Additions	Administration
Corl Street	Renovations and Additions	Administration
Ferguson Twp.	Complete	Complete
Panorama Village	Administration	Administration
Boalsburg	Complete	Complete

2014 suggested that either FA, LE, CS, or PV could be administration (but not all)

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UPDATED DESIGNS AND PHASING

**04** QUESTION AND ANSWER

(Return to Multipurpose Room)

**NEXT STEPS** 

# **FUTURE FORUM MEETINGS**

- August 15 7:00p.m. Mt. Nittany Elementary
- September 19 7:00p.m. Mt. Nittany Middle

# **FUTURE BOARD MEETINGS**

- September 12 and 26
  - 7:00p.m. Panorama Village Administration Building

Updates can be found at www.scasd.org/ elementaryplan







### **ARCHITECTS**



**MEP ENGINEERS** 



### **CM SERVICES**



**CIVIL ENGINEERS** 



- DESIGN OPTIONS
- SITE INVESTIGATION
- OPTION DEVELOPMENT
- PUBLIC VS PRIVATE ZONES OF SCHOOL
- GRADE HOUSES
- PUBLIC SPACE (CORE PROGRAM)
- SUSTAINABILITY
- PHASING

# <u>Updated Preliminary Design Options – Ground Rules</u>

- Current building size.
- Current student enrollment.
- Incorporate community, zoning, land development, administration and board committee comments.







Radio Park ES Houserville ES Corl ES

The design team continues to explore additional building size, configuration options and attendance area analysis pending results of demographic study and municipal planning efforts.



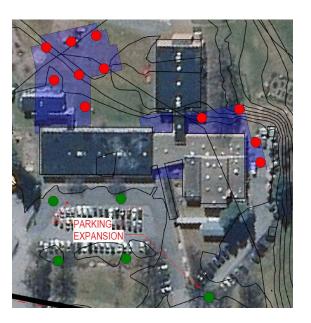


# Investigation of Site Conditions is occurring at Radio Park, Houserville and Corl Street Schools

- Site Surveys
- Zoning & Municipality Requirements
- Geotechnical Bore Investigation (Is there rock or substandard soil at locations of Building Designs?)
- Geothermal Conductivity (Is ground conducive to geothermal HVAC systems.



**Geothermal Conductivity Testing** 



**Geotech Bore Locations** 



# Design team is investigating preliminary plans and developing educational program of spaces for elementary schools at this time with school district.

- This includes one and two story building plans (No plans have been finalized at this time).
- Discussions of classroom program, security, STEM (Science, Technology, Engineering and Math) and core program (Media Center, Gym, Large Group Instruction, Art & Music and additional shared program.)
- Anticipate this will evolve over the following 3 months.



Corl St. ES- One Story Option



Corl St. ES- Two Story Option





Radio Park ES

All school designs are being developed to create clear public/community and student zones.



**Grade Houses** 



**Shared Public/ Community Space** 



**Public versus Private Zones of Schools** 

# Early Discussion of Classroom Pods/ Grade Houses

- Dedicated Zones for K-1, 2/3 & 4/5 Grade Structures
- Each Grade House typically includes 2 Grades
- Locations of Grade Houses are designed to create identity and are entered from main public spaces.
- Grade Houses include
  - 2 Grades Structures
  - Open Classroom for Informal Breakout Instruction
  - Special Education
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  SPECIAL EDUCATION

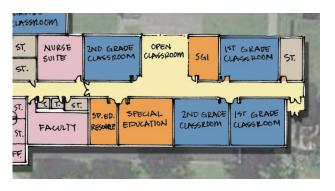
  CLASSICOM

  M. T. ST. WILLIAM

  MEDIA CENT

- Small Group Instruction (SGI)
- Close Proximity of Support Space
  - Faculty Rm, Storage, Toilets
- Ability to quickly move between formal classroom and breakout work whether in a SGI, open classroom or support. (Maximize Educational Time)





Corl ES

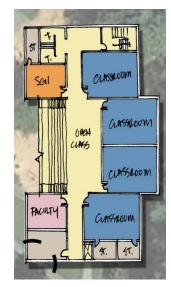
Houserville ES





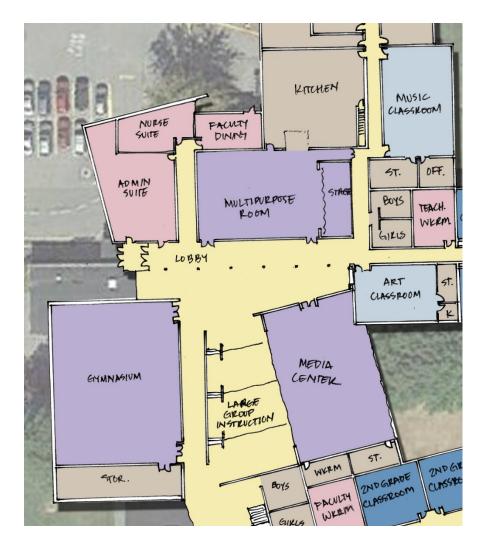
# **Open Classrooms**

- Direct Adjacency to Classroom Instruction
- Opportunity for Formal & Informal Instruction
- Visual Connection to Classrooms (Acoustically Separated)
- Multiple Classroom Instruction, Small Group Instruction, Individual
- Each Grade House typically includes 2 Grades
- Locations of Grade Houses are designed to create identity and are entered from main public spaces.









### Houserville FS

# **Shared Building Program**

- **Each Grade House Shares Core Building Program that includes** 
  - **Administration/ Nurse**
  - Kitchen/ Cafeteria
  - **Gymnasium**
  - **Media Center**
  - **Large Group Instruction**
  - **Art Classroom**
  - Music Classroom
- **Shared Program is also designed** to be used as community space after school hours.
  - Ability to limit access to entire building.



# **Early Discussions**

- Energy Efficiency
  - Heating/Air Conditioning System Selection
  - High R-Value Thermal Exterior Envelope
  - LED Lighting
  - Building Commissioning
  - Daylight Sensoring
  - Investigation of Potential Use of Solar
- Water Use Reduction
- Low-Emitting VOC Materials
- Indoor Air Quality Monitoring
  - During & After Construction
- Thermal Comfort
- Acoustics
- Daylighting and Exterior Views
- Stormwater Run-off Reduction
- School as a Teaching Tool Opportunity







Geothermal



Equipment recovers wasted energy, wrings out moisture, and slightly cools fresh air

Warmer, "used" air is removed from top of room

Warmer from top of room

Done occupied zone

Cool, Dense air spreads across floor

### **Displacement Ventilation**

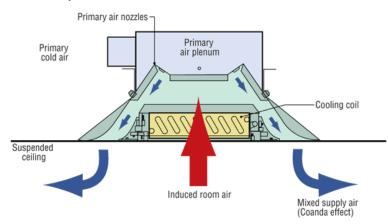


FIGURE 4. Active chilled beam-forced convection.

Thermal Storage- Minimize daytime use of electricity

**Chilled Beam** 

<u>Preliminary Discussion of efficient mechanical systems are being investigated.</u>
<u>Site & Building Design may create advantages for certain mechanical systems.</u>



**Heating & Air Conditioning System Selection** 

# **Key Elements of Phasing**

- Seperation of Students and Construction
- Phase 1 (Red Highlighted Areas)
  - Construction of new classrooms to allow existing building to be renovated.
- 18 months of construction (Anticipate 3 phases of construction)







Radio Park ES Houserville ES Corl ES

At this time it appears 3 buildings can effectively phase additions and renovation to the existing buildings. It is anticipated this will evolve with school district, design and construction team input.





### **ARCHITECTS**



#### **MEP ENGINEERS**



### **CM SERVICES**



### **CIVIL ENGINEERS**



# Cost Analysis And Demographic Study

# **Cost Analysis**

Operational

Facility

# Factors affecting Facility Costs

- Square Footage/Size of School
- Type of Constructions
  - Renovation versus New
- Land Development Costs
- Equipment/Furniture

# Factors affecting Operational Costs

- Number of Instructional Staff
  - Regular Education
    - Core/Classroom
    - Non-Core
      - Art, Music, Physical Education
  - Special Ed/Gifted Ed

# Factors affecting Operational Costs

- Support Staff
  - Custodial
  - Cafeteria
  - Office
  - Nurse

# Factors affecting Operational Costs

- Transportation
- Utilities
- Programming
- Equipment/Furniture

- Purpose
  - Gain understanding of enrollment projections
  - Number of students
  - Attendance area boundaries

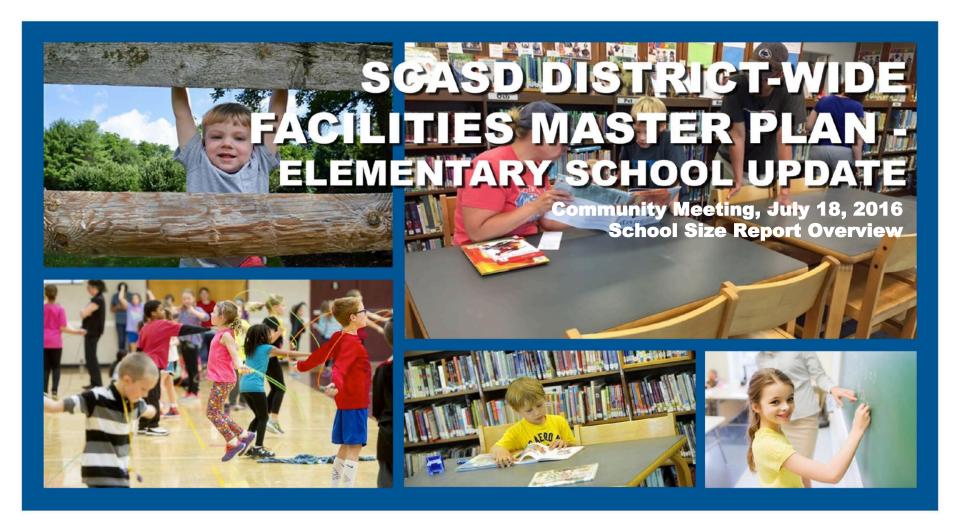
- Factors for consideration
  - New real estate development
    - Municipal planning
    - Land developers
  - Previous demographic surveys
  - http://www.scasd.org/domain/2420

- Employer trends
  - PSU looking at future employee demographic
  - Other employers
- Resident shift within the district

- Population demographics trends
  - Adults waiting to have children later
  - Population desiring walkable locations

SCASD Charte Attendance A	•							
	Corl	Easterly	•	Gray's	Houserville	Mt.	Park	Radio
Grade	St.	Parkway	Ferguson	Woods	/Lemont	Nittany	Forest	Park
K	5	6	6	2	9	7	16	7
1	4	10	4	1	4	5	20	4
2	5	9	6	4	6	5	6	5
3	4	7	6	3	10	3	13	6
4	6	4	7	0	7	6	8	3
5	3	7	11	4	4	5	6	6
Total	27	43	40	14	40	31	69	31
% of Building								
Enrollment	11%	12%	11%	3%	11%	9%	14%	8%
Enrollment	238	350	372	410	359	342	490	368

# Questions





### **ARCHITECTS**



401 East Winding Hill Road Mechanicsburg, Pennsylvania 17055 phone: (717) 458-0272 - fax: (717) 458-0047

### **MEP ENGINEERS**



### **CM SERVICES**



### **CIVIL ENGINEERS**





- Purpose
- Enrollment chart
- **03** Elementary schools in other districts
- Relationship to student learning
- Other/miscellaneous information



# **Purpose for Report**

- 1. What did the most recent master plans state about elementary school size? What actions have the Board taken in relationship to school size?
- 2. What is the capacity of each State College Area School District elementary school?
- 3. What is the current enrollment of each State College Area School District elementary school?
- 4. What are the most recent projections for each attendance area through 2022? (2013 Stewman Study)
- 5. What are the elementary school enrollments of our cohort school districts?
- 6. What does the research say about elementary school size and student learning?



### State College Area School District Elementary School Enrollment Information

SCHOOL	Current Capacity (SCASD Policy estimates)	2012-2013	2013-2014	2014-2015	<u>2015-2016</u>	Projected 2022
Corl Street	276	244	243	254	235	345
<b>Easterly Parkway</b>	414	336	340	345	346	361
Ferguson Township	414	355	352	373	371	369
Gray's Woods	483	371	383	389	408	363
Houserville/Lemont	414	357	343	337	357	351
<b>Mount Nittany</b>	391	355	351	325	335	351
Park Forest Elem	529	488	475	476	490	466
Radio Park	414	378	350	375	359	334
<b>Total Elementary</b>	3,335	2,884	2,837	2,730	2,901	2,938



# Comparing Elementary School Enrollments

- 1. Abington School District (Montgomery County, PA)
- 2. Cumberland Valley School District (Cumberland County, PA)
- 3. Lower Merion School District (Montgomery County, PA)
- 4. North Allegheny School District (Allegheny County, PA)
- 5. Parkland School District (Lehigh County, PA)
- 6. State College Area School District (Centre County, PA)
- 7. Tredyffrin/Easttown School District (Chester County, PA)
- 8. Upper Saint Clair School District (Allegheny County, PA)
- 9. Charlottesville City Schools (Charlottesville, VA)
- 10. Cambridge Public Schools (Cambridge, MA)
- 11. Penn-Harris-Madison School Corporation (Mishawaka, IN)



### **Elementary School Size:**

- Comparison to 10 other School Districts (including recent SCASD Cohort + 3 University Communities)
- Please view on separate report document. This image is for a visual comparison to rank in school size.

	District	School	Enrollment
1	Abington	Copper Beech Sch	1,081
2	Penn-Harris-Madison, IN	Discovery Middle School	896
3 4	North Allegheny	McKnight El Sch	778 767
5	North Allegheny Cumberland	Marshall El Sch Hampden El Sch	741
6	Lower Merion	Gladwyne Sch	738
7	Lower Merion	Penn Wynne Sch	677
8	Cumberland	Sporting Hill El Sch	669
9	Cumberland	Shaull El Sch	663
10	Lower Merion	Penn Valley Sch	654
11	Parkland	Fred J. Jaindl El Sch	644
12	Abington	McKinley Sch	638
13	Penn-Harris-Madison, IN	Horizon Elem Sch	592
14	Abington	Rydal East Sch	581
15	Tredyffring/Easttown Penn-Harris-Madison, IN	Devon El Sch Northpoint Elementary Sch	577 575
17	Tredyffring/Easttown	Valley Forge El Sch	573
18	Lower Merion	Merion El Sch	561
19	Parkland	Fogelsville Sch	559
20	Abington	Overlook Sch	548
21	Cumberland	Green Ridge El Sch	544
22	Lower Merion	Cynwyd Sch	536
23	Parkland	Cetronia Sch	517
24	Abington	Highland Sch	507
25	Cumberland Penn-Harris-Madison, IN	Silver Spring El Sch	507 504
26	Upper Saint Clair	Elm Road Elementary School Eisenhower El Sch	492
28	Upper Saint Clair	Streams El Sch	491
29	Penn-Harris-Madison, IN	Prairie Vista	485
30	State College	Park Forest El Sch	476
31	Tredyffring/Eastlown	Hillside El Sch	472
32	Lower Merion	Belmont Hills El Sch	466
3.3	Abington	Roslyn Sch	464
34	Penn-Harris-Madison, IN	Moran Elementary School	446
3.5	Parkland	Kernsville Sch	445
36	Penn-Harris-Madison, IN	Walt Disney Elementary School	438 436
38	Parkland Penn-Harris-Madison, IN	Parkway Manor Sch Bittersweet Elementary School	433
39	North Allegheny	Franklin El Sch	429
40	North Allegheny	Ingomar El Sch	428
41	Tredyffring/Easttown	New Eagle El Sch	415
42	Upper Saint Clair	Baker El Sch	406
43	Cumberland	Middlesex El Sch	399
44	North Allegheny	Bradford Woods El Sch	394
45	Parkland	Kratzer Sch	394
46	Charlottesville, VA State College	Burley-Moran El Sch Gray's Woods El Sch	392
48	Parkland	Schnecksville Sch	387
49	Tredyffring/Easttown	Beaumont El Sch	387
50	North Allegheny	Peebles El Sch	385
51	Parkland	Ironton Sch	385
52	Abington	Willow Hill Sch	381
53	Charlottesville, VA	Greenbrier El Sch	377
54	State College	Radio Park El Sch	375
55	State College Cambridge, MA	Ferguson Twp El Sch Amigos School	370
57	North Allegheny	Hosack El Sch	364
58	Cambridge, MA	Graham and Parks	363
59	Charlottesville, VA	Clark El Sch	362
60	Penn-Harris-Madison, IN	Mary Frank Harris Elementary Sch	361
61	Penn-Harris-Madison, IN	Meadow's Edge Elementary Sch	350
62	Cambridge, MA	Maria L. Baldwin	347
6.3	State College	Easterly Parkway El Sch	345
64	Cumberland	Monroe El Sch	343 341
66	Charlottesville, VA Charlottesville, VA	Venable El Sch Johnson El Sch	340
67	State College	Houserville/Lemont El Sch	337
68	Charlottesville, VA	Jackson-Via El Sch	328
69	State College	Mount Nittany El Sch	325
70	Cambridge, MA	Peabody	321
71	Cambridge, MA	King Open	320
72	Cambridge, MA	Martin Luther King Jr.	309
73	Cambridge, MA	Morse	308
7.5	Cambridge, MA Penn-Harris-Madison, IN	Cambridgeport Elsie Rogers Elem Sch	298 284
76	Cambridge, MA	John M Tobin	281
77	Cambridge, MA	Kennedy-Longfellow	270
78	Cambridge, MA	Fletcher/Maynard Academy	258
79	Cambridge, MA	Haggerty	258
80	State College	Cori Street El Sch	254
81	Penn-Harris-Madison, IN	Madison Elementary School	139



# **Elementary School Size & Student Learning**

- 1. Leithwood, K. & Jantzi, D. (March 2009). A Review of Empirical Evidence About School Size Effects: A Policy Perspective. *Review of Educational Research* (vol. 79 no. 1464-490).
- 2. Stevenson, K. (April 2006). School Size and Its Relationship to Student Outcomes and School Climate: A Review and Analysis of Eight South Carolina Statewide Studies. *National Clearinghouse for Educational Facilities*, 1090 Vermont Avenue, N.W., Suite 700, Washington, D.C. 20005-4905. <a href="http://www.ncef.org/pubs/size">http://www.ncef.org/pubs/size</a> outcomes.pdf



# Miscellaneous Information & Questions/Discussion



### **State College Area School District**

### Elementary School Enrollments and School Size Report July 18, 2016

As part of the district's facility master planning effort to address school buildings in need of updates, the administration has been charged with developing a report that answers questions pertaining to facility capacity and student enrollment, as well as the relationship of school size to student learning.

The report is organized in response to the following questions:

- 1. What did the most recent master plans state about elementary school size? What actions have the Board taken in relationship to school size?
- 2. What is the capacity of each State College Area School District elementary school?
- 3. What is the current enrollment of each State College Area School District elementary school?
- 4. What are the most recent projections for each attendance area through 2022? (Note: from 2013 Stewman Study)
- 5. What are the elementary school enrollments of our cohort school districts? (Note: includes Upper Saint Clair School District data, as well as each district's composite SAT score from 2015)
- 6. What does the research say about elementary school size and student learning?

# 1. What did the most recent master plans state about elementary school size? What actions have the Board taken in relationship to school size?

Below is a chart that attempts to summarize the various Elementary School recommendations contained in Master Plans that have been approved since 1999. Please note that this is an abridged summary of what is contained in very large documents and every detail is not conveyed in this memo.

### 1999 Elementary School Master Plan

This plan spoke to elementary schools only. At that time, Mount Nittany Middle School was a new facility, Park Forest Middle School had a recently completed addition with further renovations planned, and additions were being planned for North and South High School. The plan was structured in three phases, which were intended to address all of the Elementary School needs at the time.

Phase 1 had a single set of options, while phases 2 and 3 had options A and B.

### Phase 1-

- → Additions and Renovations to PFE
- → Discontinue use of Fairmount Avenue as an Elementary school
- → Close Matternville Elementary
- → Build a new Elementary School (Gray's Woods)
- → Additions and Renovations to Easterly Parkway

### Phase 2-

	A	В
Corl Street	Close	Reno/Add
Ferguson Township	Close	Reno/Add
New school in FT	Replace CS and FT	NA
Boalsburg	Close	Reno/Add
Panorama Village	Reno/Add combine BO	Reno/Add

### Phase 3-

	A	В
Houserville	Reno/Add combine LE	Reno/Add
Lemont	Close	Reno/Add
Radio Park	Reno/Add	Reno/Add

At the approval of the plan, five Board actions were taken:

- 1. Concurrence on a "three-phase" approach
- 2. Hire a design professional for the Phase 1 projects
- 3. Begin site search for new elementary (which became Gray's Woods)
- 4. Develop Ed Specs for Phase 1 projects
- 5. Hire Bond Counsel for Phase 1 projects

### 2001 District-wide Master Plan

This plan expanded the previous Elementary School Master Plan to include all facilities. The Park Forest Elementary School project, which was approved as a Renovations and Additions project in 1999 plan, stalled in design development and was not completed concurrently with Gray's Woods and Easterly Parkway as intended. Consequently, the main focus of the 2001 plan dealt with Park Forest Elementary and the High School.

A single set of Elementary School recommendations were:

- Renovations and Additions at Corl St, Ferguson Twp, and Radio Park
- Renovations and Additions at Houserville and Panorama Village to combine "sister schools"
- Sell Matternville, Lemont, and Boalsburg Elementary Schools
- Build New or Renovations and Additions at Park Forest Elementary

As a result of this plan a new school was built at Park Forest Elementary (opened in 2005), Matternville was sold, and an architect was hired for a High School project.

### 2004 District-wide Facilities Master Plan

This plan was focused on the High School and contained no new Elementary information.

### 2009 District-wide Facilities Master Plan

This plan contained 17 recommendations regarding both school-specific options and planning in general.

As an outcome of this plan the following projects were completed:

- Combine Boalsburg/Panorama Village at Mount Nittany campus
- Sale of Boalsburg Elementary
- Renovation and Additions at Ferguson Township
- Small Addition at Gray's Woods (four rooms)

The following was recommended for the other Elementary Schools:

- Combine Houserville/Lemont at Houserville (new or Add/Reno)
- Renovations and Additions or New Construction at Corl Street
- Renovations and Additions at Radio Park

The plan also recommended that Boalsburg and Lemont be repurposed in a way that best served the community.

### 2014 District-wide Facilities Master Plan

This plan was focused primarily on the High School, but also addressed Memorial Field, administrative functions, and the remaining Elementary Schools.

Renovations and Additions were recommended for Radio Park and Corl Street(as per 2009 master plan). Houserville and Lemont were recommended for either Renovations and Additions in current configuration or combined at Houserville.

Depending on the outcome of other projects: Fairmount Avenue, Corl Street, Lemont, and Panorama Village were studied as options for administrative functions

- 2. What is the capacity of each State College Area School District elementary school?
- 3. What is the current enrollment of each State College Area School District elementary school?
- 4. What are the most recent projections for each attendance area through 2022? (2013 Stewman Study)

### **Current SCASD School Capacity, Recent Enrollment & Projections**

<u>SCHOOL</u>	Current Capacity (SCASD Policy estimates)	2012-2013	2013-2014	2014-2015	<u>2015-2016</u>	Projected 2022
Corl Street	276	244	243	254	235	345
Easterly Parkway	414	336	340	345	346	361
Ferguson Township	414	355	352	373	371	369
Gray's Woods	483	371	383	389	408	363
Houserville/Lemont	414	357	343	337	357	351
Mount Nittany	391	355	351	325	335	351
Park Forest Elem	529	488	475	476	490	466
Radio Park	414	378	350	375	359	334
<b>Total Elementary</b>	3,335	2,884	2,837	2,730	2,901	2,938

#### Notes:

- Note: All SCASD school enrollment data was submitted to the Pennsylvania Department of Education annually on October 1. The SCASD data in this report is consistent with our October 1 enrollments of respective years.
- Projected 2022 K-5 Enrollment range is 2,804 3,099 (Stewman, 2014)
- For capacity, 23 students per core classroom was utilized for this calculation (same as 2009 approach). This is more realistic than expecting each classroom to simultaneously be at max capacity. Class size guidelines for elementary class size range from 21 27, http://www.scasd.org/cms/lib5/PA01000006/Centricity/Domain/86/126-Guidelines.pdf.
- Dr. Stewman's projections for 2022 are included above. Although his overall data is consistent with our 2015-2016 enrollment, his data show different enrollments per some of our attendance areas (Stewman, 2014; p. 47). <a href="http://www.scasd.org/Page/30291">http://www.scasd.org/Page/30291</a>

# 5. What are the elementary school enrollments of our cohort school districts? (Note: includes Upper Saint Clair School District data, as well as each district's composite SAT score from 2015)

### **Cohort District Elementary Schools (PA School Data is 2014-2015)**

1. Abington School District (Montgomery County, PA)

District Enrollment = 7,674

SAT Composite Average = 1,536

Percent students from low income families (2014-2015) = 20.8%

Out of 500 school districts in Pennsylvania, the Abington School District had the 96th highest per pupil expenditure during fiscal year 2013.

	K5F	001	002	003	004	005	006	Total
Copper Beech Sch	153	162	141	155	150	163	157	1,081
Highland Sch	68	72	83	75	66	70	73	507
McKinley Sch	87	100	88	90	108	74	91	638
Overlook Sch	69	85	75	80	70	99	70	548
Roslyn Sch	79	68	64	60	68	55	70	464
Rydal East Sch	81	90	89	72	78	90	81	581
Willow Hill Sch	52	46	54	64	55	64	46	381

2. Cumberland Valley School District (Cumberland County, PA)

District Enrollment = 8,397

SAT Composite Average = 1,627

Percent students from low income families (2014-2015) = 18%

Out of 500 school districts in Pennsylvania, the Cumberland Valley School District had the 398th highest per pupil expenditure during fiscal year 2013.

	K5A	K5P	K5F	001	002	003	004	005	Total
Green Ridge El Sch	42	52	0	102	75	95	89	89	544
Hampden El Sch	48	57	0	123	129	126	135	123	741
Middlesex El Sch	0	48	0	60	64	80	83	64	399
Monroe El Sch	14	24	0	51	64	63	51	76	343
Shaull El Sch	48	49	0	94	122	103	122	125	663
Silver Spring El Sch	33	43	0	96	93	79	80	83	507
Sporting Hill El Sch	42	73	0	114	111	103	126	100	669

### 3. Lower Merion School District (Montgomery County, PA)

District Enrollment = 8,071

SAT Composite Average(2 high schools) = 1,777 & 1,744

Percent students from low income families (2014-2015) = 10.3%

Out of 500 school districts in Pennsylvania, the Lower Merion School District had the 3rd highest per pupil expenditure during fiscal year 2013.

	K5A	K5P	K5F	001	002	003	004	005	Total
Belmont Hills El Sch	42	12	0	89	81	71	93	78	466
Cynwyd Sch	40	29	0	84	100	104	85	94	536
Gladwyne Sch	74	16	0	104	112	144	137	151	738
Merion El Sch	38	36	0	92	102	112	101	80	561
Penn Valley Sch	45	16	0	132	130	112	123	96	654
Penn Wynne Sch	64	34	0	115	127	115	118	104	N

### 4. North Allegheny School District (Allegheny County, PA)

District Enrollment = 8,215

SAT Composite Average = 1,712

Percent students from low income families (2014-2015) = 4.9%

Out of 500 school districts in Pennsylvania, the North Allegheny School District had the 7th highest per pupil expenditure during fiscal year 2013.

	K5A	K5P	K5F	001	002	003	004	005	Total
Bradford Woods El Sch	33	17	0	68	73	62	69	72	394
Franklin El Sch	35	17	0	56	78	80	68	95	429
Hosack El Sch	21	21	0	65	65	49	71	72	364
Ingomar El Sch	47	32	0	56	69	66	86	72	428
Marshall El Sch	42	67	0	107	124	144	131	152	767
McKnight El Sch	61	45	0	131	121	149	128	143	778
Peebles El Sch	45	15	0	55	70	74	54	72	385

### 5. Parkland School District (Lehigh County, PA)

District Enrollment = 9,159

SAT Composite Average = 1,640

Percent students from low income families (2014-2015) = 19.9%

Out of 500 school districts in Pennsylvania, the Parkland School District had the 229th highest per pupil expenditure during fiscal year 2013.

	K5A	K5P	K5F	001	002	003	004	005	Total
Cetronia Sch	37	32	0	81	85	87	90	105	517
Fogelsville Sch	55	33	0	101	76	87	122	85	559
Fred J. Jaindl El Sch	57	36	0	115	94	116	109	117	644
Ironton Sch	21	42	0	53	78	55	62	74	385
Kernsville Sch	41	22	0	60	76	80	72	94	445
Kratzer Sch	38	14	0	75	60	71	64	72	394
Parkway Manor Sch	31	16	0	63	80	91	74	81	436
Schnecksville Sch	19	15	0	65	71	70	70	77	387

### 6. State College Area School District (Centre County, PA)

District Enrollment = 6,776

SAT Composite Average = 1,654

Percent students from low income families (2014-2015) = 14.7%

Out of 500 school districts in Pennsylvania, the State College Area School District had the 75th highest per pupil expenditure during fiscal year 2013.

	K5F	001	002	003	004	005	Total
Corl Street El Sch	42	41	32	50	37	52	254
Easterly Parkway El Sch	56	52	48	61	67	61	345
Ferguson Twp El Sch	62	62	56	61	76	56	373
Gray's Woods El Sch	57	62	72	60	68	68	389
Houserville/Lemont El Sch	41	65	57	46	73	55	337
Mount Nittany El Sch	49	38	69	52	63	54	325
Park Forest El Sch	77	59	99	71	82	88	476
Radio Park El Sch	66	49	57	66	67	69	375

### 7. Tredyffrin/Easttown School District (Chester County, PA)

District Enrollment = 6,553

SAT Composite Average = 1,820

Percent students from low income families (2014-2015) = 5.9%

Out of 500 school districts in Pennsylvania, the Tredyffrin/Easttown School District had the 108th highest per pupil expenditure during fiscal year 2013.

	K5A	K5P	K5F	001	002	003	004	Total
Beaumont El Sch	18	36	0	72	98	84	79	387
Devon El Sch	62	40	0	110	109	154	102	577
Hillside El Sch	42	44	0	78	101	99	108	472
New Eagle El Sch	39	17	0	80	92	99	88	415
Valley Forge El Sch	55	40	0	112	120	128	118	573

### 8. Upper Saint Clair School District (Allegheny County, PA)

District Enrollment = 4,089

SAT Composite Average = 1,741

Percent students from low income families (2014-2015) = 8.1%

Out of 500 school districts in Pennsylvania, the Upper Saint Clair School District had the 141st highest per pupil expenditure during fiscal year 2013.

	K5A	K5P	K5F	001	002	003	004	Total
Baker El Sch	47	41	0	67	80	80	91	406
Eisenhower El Sch	43	37	0	85	110	97	120	492
Streams El Sch	59	34	0	88	103	111	96	491

### **Comparable College Town School Districts:**

9. Charlottesville City Schools (Charlottesville, VA)

District Enrollment = 4,134

SAT Composite Average (2015) = 1,658

Percent students from low income families (2014-2015) = 54%

Out of 144 school districts in Virginia, the Charlottesville City Schools had the fifth highest per pupil expenditure during fiscal year 2012.

The University of Virginia sits within the Charlottesville City School system.

	PreK	K5F	001	002	003	004	Total
Burley-Moran El Sch	25	80	86	76	65	60	392
Clark El Sch	67	83	60	58	48	46	362
Greenbrier El Sch	29	67	87	74	64	56	377
Jackson-Via El Sch	43	64	63	58	57	43	328
Johnson El Sch	53	66	77	55	40	49	340
Venable El Sch	38	60	62	61	59	61	341

10. Cambridge Public Schools (Cambridge, MA)

District Enrollment = 6,607

SAT Composite Average (2014) = 1,605

Percent students from low income families (2013-2014) = 27.7%

Out of 320 school districts in Massachusetts, the Cambridge Public Schools had the fourth highest per pupil expenditure during fiscal year 2015.

Harvard University, Massachusetts Institute of Technology, and Lesley University sit within to the Cambridge Public Schools system.

http://profiles.doe.mass.edu/profiles/student.aspx?orgcode=00490000&orgtypecode=5&fycode=2016

	Enrollment by Grade (2015-16)										
	PK	K	1	2	3	4	5	6	7	8	Total
Amigos School	26	48	48	45	47	38	38	25	24	31	370
Cambridgeport	47	49	45	43	40	35	39	0	0	0	298
Fletcher/Maynard Academy	50	46	40	35	38	20	29	0	0	0	258
Graham and Parks	31	50	54	60	67	48	53	0	0	0	363
Haggerty	25	46	46	41	39	30	31	0	0	0	258
John M Tobin	91	38	38	31	34	23	26	0	0	0	281
Kennedy-Longfellow	39	55	50	39	32	22	33	0	0	0	270
King Open	26	65	61	46	46	43	33	0	0	0	320
Maria L. Baldwin	54	66	60	43	44	35	45	0	0	0	347
Martin Luther King Jr.	31	64	52	53	44	36	29	0	0	0	309
Morse	49	51	41	42	46	38	41	0	0	0	308
Peabody	48	50	44	47	42	47	43	0	0	0	321

### 11. Penn-Harris-Madison School Corporation (Mishawaka, IN)

District Enrollment = 10,682

SAT Composite Average (2014) = 1,660

Percent students from low income families (2014-2015) = 28.2%

The University of Notre Dame sits adjacent to the Penn-Harris-Madison School Corporation (home of Penn High School).

	K5F	001	002	003	004	005	Total
Walt Disney Elementary School	62	78	85	77	72	64	438
Prairie Vista	76	82	80	94	60	93	485
Mary Frank Harris Elementary Sch	53	55	64	52	66	71	361
Madison Elementary School	20	22	29	18	23	27	139
Elm Road Elementary School	96	87	89	93	73	66	504
Elsie Rogers Elem Sch	47	47	51	41	47	51	284
Moran Elementary School	74	72	48	87	78	87	446
Bittersweet Elementary School	69	76	74	70	61	83	433
Horizon Elem Sch	83	107	96	103	119	84	592
Meadow's Edge Elementary Sch	75	51	65	58	45	56	350
Northpoint Elementary Sch	96	86	97	104	99	93	575

### 6. What does the research say about elementary school size and student learning?

### **Studies for Consideration:**

The information below includes two reports, reviewing approximately 65 studies that include school size and student learning. The conclusions help to clarify some of this relationship between school size and student learning. Interestingly, the Leithwood and Jantzi (2009) study reviewed 57 studies and includes school size recommendations.

Leithwood, K. & Jantzi, D. (March 2009). A Review of Empirical Evidence About School Size Effects: A Policy Perspective. *Review of Educational Research* (vol. 79 no. 1464-490).

This review examined 57 post-1990 empirical studies of school size effects on a variety of student and organizational outcomes. The weight of evidence provided by this research clearly favors smaller schools. Students who traditionally struggle at school and students from disadvantaged social and economic backgrounds are the major benefactors of smaller schools. Elementary schools with large proportions of such students should be limited in size to not more than about 300 students; those serving economically and socially heterogeneous or relatively advantaged students should be limited in size to about 500 students. Secondary schools serving exclusively or largely diverse and/or disadvantaged students should be limited in size to about 600 students or fewer, while those secondary schools serving economically and socially heterogeneous or relatively advantaged students should be limited in size to about 1,000 students.

Stevenson, K. (April 2006). School Size and Its Relationship to Student Outcomes and School Climate: A Review and Analysis of Eight South Carolina Statewide Studies. *National Clearinghouse for Educational Facilities*, 1090 Vermont Avenue, N.W., Suite 700, Washington, D.C. 20005-4905. <a href="http://www.ncef.org/pubs/size">http://www.ncef.org/pubs/size</a> outcomes.pdf

Reviews eight school size studies performed by doctoral students and graduate faculty at the University of South Carolina. These studies examine the relationship of South Carolina school size to academic achievement and to costs per student at all grade span groupings, including elementary, middle, and high school. The studies are categorized by grade span covered, and their methodology and findings summarized. Results of the studies are varied and sometimes contradictory, and additional issues arise such as poverty, differing results in grade spans, cost versus outcomes, middle and elementary school climate factors, and variance of the South Carolina findings from those in other states. Smaller middle schools appeared to produce better student outcomes, and where larger elementary and high schools appear to perform better, there is evidence that results vary dramatically depending on the children served.

### **Miscellaneous Information**

### Elementary Student Walk vs. Bus Transportation (2015-2016)

October 2015	WALK	PERCENT	BUS	PERCENT	TOTAL
Park Forest Elem.	162	39%	249	61%	481
Easterly Parkway	125	26%	356	74%	345
Corl Street	123	51%	116	49%	239
Radio Park	60	16%	308	84%	368
Ferguson Township	37	11%	308	89%	367
Mt. Nittany Elem.	35	10%	311	90%	346
Houserville	26	15%	150	85%	176
Gray's Woods	19	5%	348	95%	411
Lemont	4	2%	169	98%	173
District Total	591	20%	2315	80%	2906

# **Charter School Enrollment - Oct 1 2014 ( All students from SCASD and surrounding districts)**

Centre Learning Community CS (Grades 5-8)	98
Nittany Valley CS (Grades K-5)	49
Wonderland CS (Grades K-5)	89
Young Scholars of Central PA CS (Grades K-8)	309
Total Charter Enrollment	555

### **SCASD/Charter Ratios**

October 2015	Charter Enrollment	School Enrollment	Percent Charter to School
Corl Street	36	239	15%
Park Forest Elementary	73	481	15%
Easterly Parkway	49	345	14%
Houserville	22	176	13%
Ferguson Township	42	367	11%
Lemont	18	173	10%
Mount Nittany Elementary	36	346	10%
Radio Park	35	368	10%
Gray's Woods	13	411	3%
Total	324	2,906	11%

### Notes:

### SAT Data for Pennsylvania Public Schools:

 $\frac{http://www.education.pa.gov/K-12/Assessment\%20 and\%20 Accountability/Pages/SAT-and-ACT\_aspx\#.V3LH6zkrL-k}{}$ 

### Percentage of Low Income Students in PA Schools:

http://www.education.pa.gov/Data-and-Statistics/Pages/Loan-Cancellation,-Low-Income.aspx#. V3wGRzkrL-k

	District	School	Enrollmen
1	Abington	Copper Beech Sch	1,081
2	Penn-Harris-Madison, IN	Discovery Middle School	896
3	North Allegheny	McKnight El Sch	778
4	North Allegheny	Marshall El Sch	767
5	Cumberland	Hampden El Sch	741
6	Lower Merion	Gladwyne Sch	738
7	Lower Merion	Penn Wynne Sch	677
8	Cumberland	Sporting Hill El Sch	669
9	Cumberland	Shaull El Sch	663
10	Lower Merion	Penn Valley Sch	654
11	Parkland	Fred J. Jaindl El Sch	644
12	Abington	McKinley Sch	638
13	Penn-Harris-Madison, IN	Horizon Elem Sch	592
14	Abington	Rydal East Sch	581
15	Tredyffring/Easttown	Devon El Sch	577
16	Penn-Harris-Madison, IN	Northpoint Elementary Sch	575
17	Tredyffring/Easttown	Valley Forge El Sch	573
18	Lower Merion	Merion El Sch	561
19	Parkland	Fogelsville Sch	559
20	Abington	Overlook Sch	548
21	Cumberland	Green Ridge El Sch	544
22	Lower Merion	Cynwyd Sch	536
23	Parkland	Cetronia Sch	517
24	Abington	Highland Sch	507
25	Cumberland	Silver Spring El Sch	507
26	Penn-Harris-Madison, IN	Elm Road Elementary School	504
27	Upper Saint Clair	Eisenhower El Sch	492
28	Upper Saint Clair	Streams El Sch	491
29	Penn-Harris-Madison, IN	Prairie Vista	485
30	State College	Park Forest El Sch	476
31	Tredyffring/Easttown	Hillside El Sch	472
32	Lower Merion	Belmont Hills El Sch	466
33	Abington	Roslyn Sch	464
34	Penn-Harris-Madison, IN	Moran Elementary School	446
35	Parkland	Kernsville Sch	445
36	Penn-Harris-Madison, IN	Walt Disney Elementary School	438
37	Parkland	Parkway Manor Sch	436

38	Penn-Harris-Madison, IN	Bittersweet Elementary School	433
39	North Allegheny	Franklin El Sch	429
40	North Allegheny	Ingomar El Sch	428
41	Tredyffring/Easttown	New Eagle El Sch	415
42	Upper Saint Clair	Baker El Sch	406
43	Cumberland	Middlesex El Sch	399
44	North Allegheny	Bradford Woods El Sch	394
45	Parkland	Kratzer Sch	394
46	Charlottesville, VA	Burley-Moran El Sch	392
47	State College	Gray's Woods El Sch	389
48	Parkland	Schnecksville Sch	387
49	Tredyffring/Easttown	Beaumont El Sch	387
50	North Allegheny	Peebles El Sch	385
51	Parkland	Ironton Sch	385
52	Abington	Willow Hill Sch	381
53	Charlottesville, VA	Greenbrier El Sch	377
54	State College	Radio Park El Sch	375
55	State College	Ferguson Twp El Sch	373
56	Cambridge, MA	Amigos School	370
57	North Allegheny	Hosack El Sch	364
58	Cambridge, MA	Graham and Parks	363
59	Charlottesville, VA	Clark El Sch	362
60	Penn-Harris-Madison, IN	Mary Frank Harris Elementary Sch	361
61	Penn-Harris-Madison, IN	Meadow's Edge Elementary Sch	350
62	Cambridge, MA	Maria L. Baldwin	347
63	State College	Easterly Parkway El Sch	345
64	Cumberland	Monroe El Sch	343
65	Charlottesville, VA	Venable El Sch	341
66	Charlottesville, VA	Johnson El Sch	340
67	State College	Houserville/Lemont El Sch	337
68	Charlottesville, VA	Jackson-Via El Sch	328
69	State College	Mount Nittany El Sch	325
70	Cambridge, MA	Peabody	321
71	Cambridge, MA	King Open	320
72	Cambridge, MA	Martin Luther King Jr.	309
73	Cambridge, MA	Morse	308
74	Cambridge, MA	Cambridgeport	298
75	Penn-Harris-Madison, IN	Elsie Rogers Elem Sch	284

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76	Cambridge, MA	John M Tobin	281
77	Cambridge, MA	Kennedy-Longfellow	270
78	Cambridge, MA	Fletcher/Maynard Academy	258
79	Cambridge, MA	Haggerty	258
80	State College	Corl Street El Sch	254
81	Penn-Harris-Madison, IN	Madison Elementary School	139



## ELEMENTARY UPDATE

### 2016 District-wide Facilities Master Plan

### What's going on?

We are pursuing an accelerated facilities master plan focused on updating our older elementary schools.

Our goals:

- 1. To attain comparable facilities and programs.
- **2.** Energy efficiency and sustainability.
- **3.** Program flexibility for all our elementary schools.

# What's happened so far?

On July 1, the Commonwealth Finance Authority awarded \$3.8 million in grants for potential Houserville and Radio Park projects. The funds do not obligate the district to proceed with projects, and will be returned to the state if unused. The district applied for the state capital reimbursement funds through the PlanCon program. By applying to the Commonwealth's PlanCon program before a moratorium took effect, the district also is eligible for partial project reimbursement funds estimated to provide between \$3 million and \$4 million. Four community forums were held in May and June to provide opportunities for public discussion.

Read more: www.scasd.org/elementaryplan.

### What's being considered?

- Renovation and/or new construction projects for Corl Street, Houserville, and Radio Park elementary schools, all of which were built in the 1950s.
- The Board is evaluating the following options for each school:
- \* Houserville Elementary: renovation and additions OR new construction at the Houserville site. Lemont Elementary (K-2) would be merged with Houserville Elementary (3-5). These sister schools share an attendance area. Combining these schools has been recommended by master planning processes since 1999.
- \* Radio Park Elementary: renovation and additions OR new construction at the Radio Park site.
- \* Corl Street Elementary: renovation and additions at the Corl Street site OR possible closure and repurposing.
- the District has hired a demography firm to analyze school age population over the next decade and school attendance areas.

### What will happen next?

The next forum at 7 p.m. July 18 at Ferguson Township Elementary School will focus on prior master planning conclusions, district and cohort district school size and enrollment, project cost analysis, research on school size and student learning, and updated proposed building design plans.

Other forums will take place at **7 p.m.** on Aug.15 at Mount Nittany Elementary School and Sept. 19 at Mount Nittany Middle School. All forums will provide childcare.

Crabtree Rohrbaugh & Associates architects continue to refine potential designs based on research and community feedback, and the Board expects to receive the demographic analysis results later this summer.