



Crabtree, Rohrbaugh & Associates

# **MONTROUSVILLE AREA SCHOOL DISTRICT**

## **DISTRICT WIDE FACILITY STUDY**

June 3<sup>rd</sup> & 10<sup>th</sup>, 2020

# FACILITY STUDY PROCESS

1



Define Goals

2



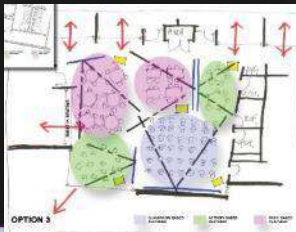
Information  
Gathering

3



Analyze Data

4



Determine Needs

5



Develop Options

6



Recommendations

# INFORMATION GATHERING & ANALYSIS

- EDUCATIONAL PROGRAM
- EXISTING BUILDING CAPACITIES
- EDUCATIONAL & FUNCTIONAL DEFICIENCIES
- PROJECTED ENROLLMENT
- EXISTING FACILITY CONDITIONS
- COST TO UPGRADE TO CURRENT STANDARDS

# GOALS & OBJECTIVES



# MASD GOALS & OBJECTIVES

- Provide equity among elementary grade students.
- Improve the existing facility infrastructure at Loyalsock Valley Elementary School and Lyter Elementary School.
- Improve the efficiency and consistency of resources and continuity of educational delivery.
- Provide 21<sup>st</sup> Century educational spaces and experiences at the Middle School and Elementary Schools that reflect the curriculum.
- Address safety and security concerns at Loyalsock Valley Elementary School
- Provide air conditioning at all schools.
- Develop fiscally responsible solutions that address costs of capital projects, transportation, staffing, and operations.

**EXISTING BUILDING CAPACITY**

# Loyalsock Valley Elementary School

	LOYALSOCK VALLEY ELEMENTARY SCHOOL		
	No. of Rooms	PDE Unit FTE Cap	Sub-Total
Standard Classrooms	13	25	325
Unassigned Classrooms		25	0
Science Classrooms		25	0
Learning Support Classrooms	1		
Learning Support Small Group Instruction			
Special Education Classrooms	1		
Small Group Instruction	1		
Reading Support	1		
Computer Labs	1		
Music Classrooms	1		
Art Classrooms	1		
STEM Classroom			
Large Group Instruction			
Library	1		
Auditorium			
Gymnasium			
Cafeteria			
Multi-Purpose Room	1		
PDE Building Capacity:			325
Functional Building Capacity:		90%	<b>293</b>
Total 2019-20 Enrollment:			257



# Lyter Elementary School

	LYTER ELEMENTARY SCHOOL		
	No. of Rooms	PDE Unit FTE Cap	Sub-Total
Standard Classrooms	21	25	525
Unassigned Classrooms	2	25	50
Science Classrooms		25	0
Learning Support Classrooms	1		
Learning Support Small Group Instruction			
Special Education Classrooms	1		
Small Group Instruction	3		
Reading Support	1		
Computer Labs	2		
Music Classrooms	1		
Art Classrooms	1		
STEM Classroom			
Large Group Instruction			
Library	1		
Auditorium			
Gymnasium			
Cafeteria			
Multi-Purpose Room	1		
PDE Building Capacity:			575
Functional Building Capacity:		90%	<b>518</b>
Total 2019-20 Enrollment:			440

# C.E. McCall Middle School

Types of Educational Spaces	C.E. MCCALL MIDDLE SCHOOL		
	No. of Rooms	PDE Unit FTE Cap	Sub-Total
Standard Classrooms	23	25	575
Learning Support Classroom	2		0
Learning Support Small Group Instruction	2		0
Special Education Classroom	3		0
Computer Labs		20	0
STEM Classrooms	2	25	50
Science Classrooms	2	25	50
Science Labs	1	20	20
Large Group Instruction			0
Small Group Instruction			0
Business Classroom		25	0
Business Labs		20	0
Art Classrooms	2	20	40
Music Classroom	1	25	25
Band Room		25	0
Orchestra Room	1	25	25
Choral Room		25	0
Family Consumer Science Room	1	20	20
Tech Ed / CTE Lab	2	20	40
Library	1		0
Gymnasium	1	66	66
Auxiliary Gymnasium	1	33	33
Weight/Fitness Room	1		0
Wrestling Room	2		0
Cafeteria	1		0
PDE Building Capacity:			944
Functional Building Capacity:			85% <b>802</b>
Total 2019-20 Enrollment:			643

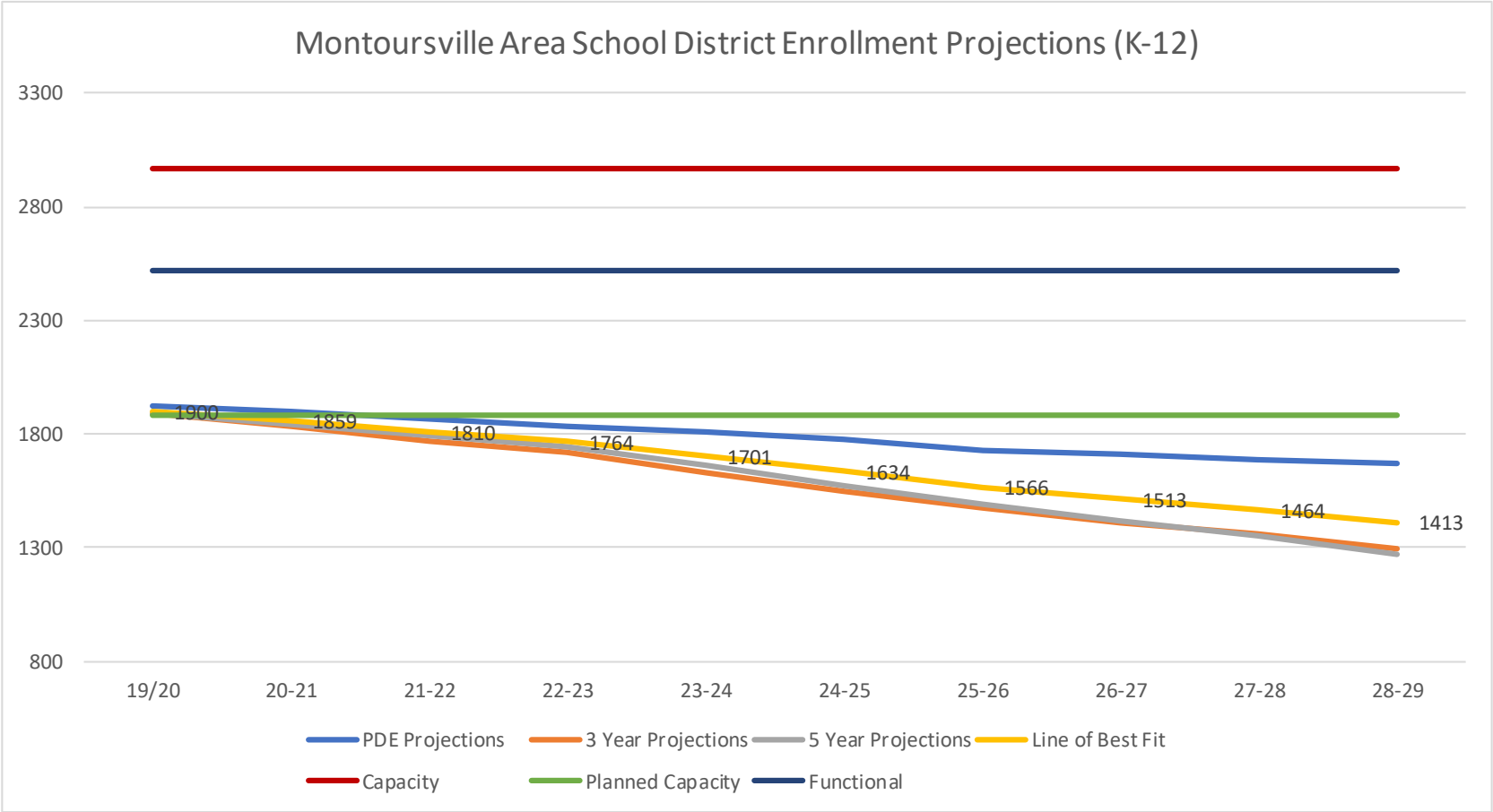
# Montoursville Area High School

Types of Educational Spaces	MONTOURSVILLE AREA HIGH SCHOOL		
	No. of Rooms	PDE Unit FTE Cap	Sub-Total
Standard Classrooms	23	25	575
Learning Support Classroom			
Learning Support Small Group Instruction	6		
Special Education Classroom	5		
Special Education Small Group Instruction			
Computer Labs	4	20	80
STEM Classrooms		25	0
Science Classrooms		25	0
Science Labs	7	20	140
Large Group Instruction	1		
Small Group Instruction			
Business Classroom		25	0
Business Labs	1	20	20
Art Classrooms	2	20	40
Music Classroom	1	25	25
Band Room	1	25	25
Orchestra Room		25	0
Choral Room	1	25	25
Family Consumer Science Room		20	0
Tech Ed / CTE Lab	3	20	60
Library	1		
Gymnasium	1	132	132
Auxiliary Gymnasium	1	33	33
Weight/Fitness Room	2		
Wrestling Room			
Cafeteria	1		
PDE Building Capacity:			1155
Functional Building Capacity:		80%	<b>924</b>
Total 2019-20 Enrollment:			610

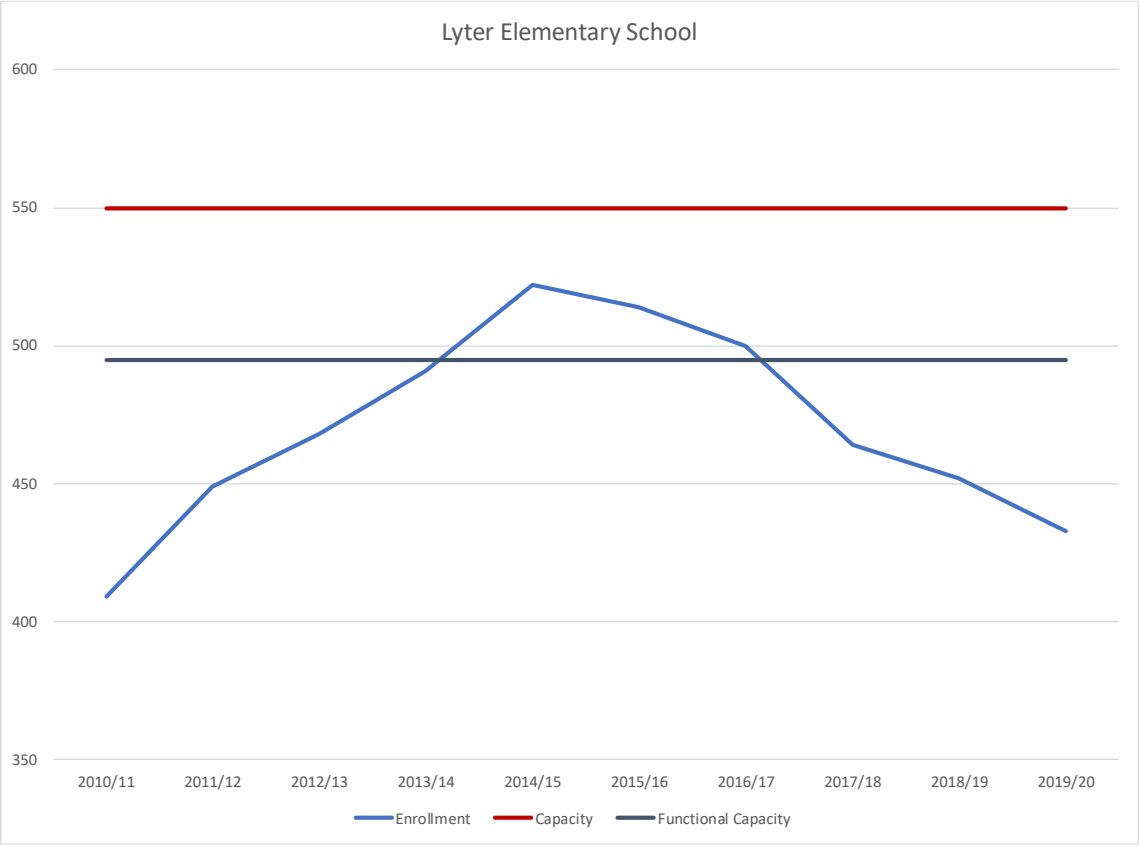
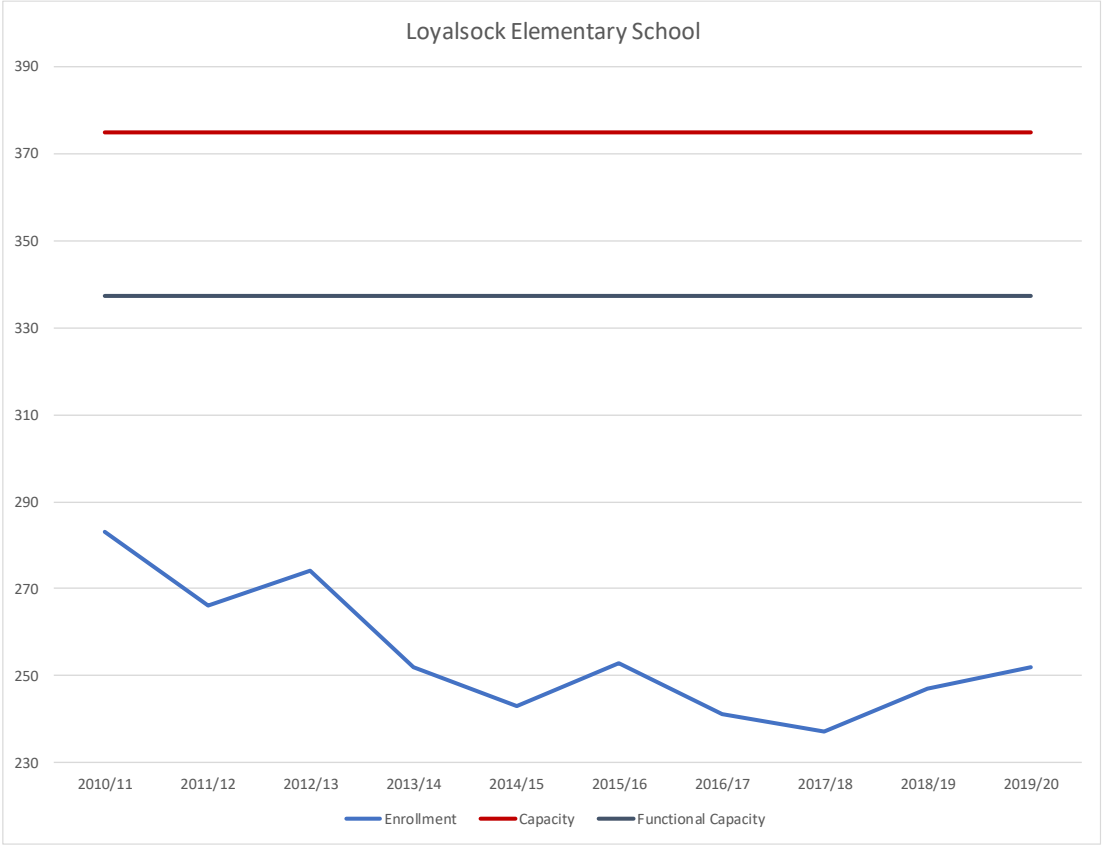
**PROJECTED ENROLLMENT**

# Enrollment Projections

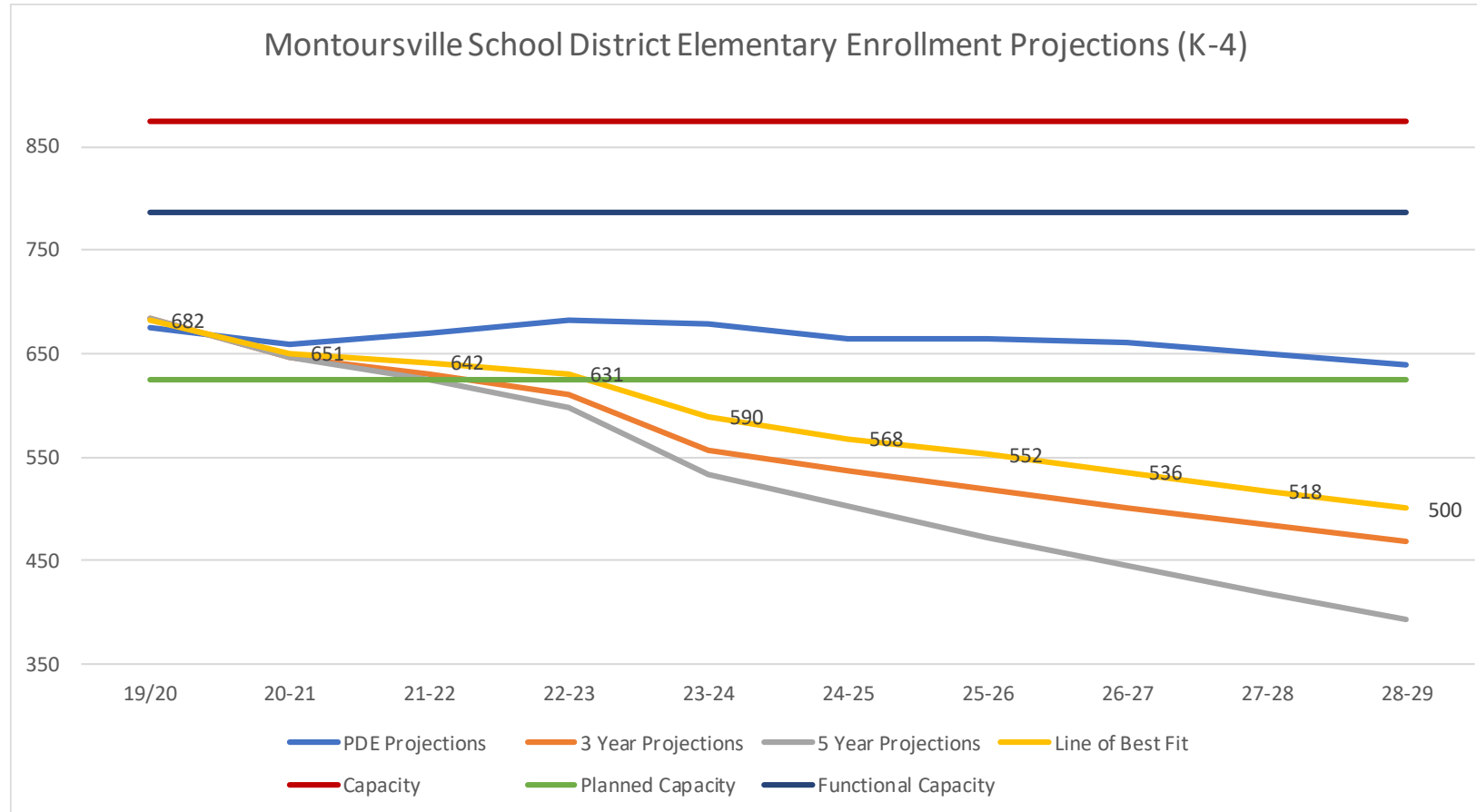
Three Year Growth Rates			Five Year Growth Rates	
K	-3.42%		K	-5.90%
K-4	-2.68%		K-4	-2.23%
5-8	-2.41%		5-8	-0.43%
9-12	-1.56%		9-12	-1.39%
K-12	-2.21%		K-12	-1.37%



# Enrollment Projections



# Enrollment Projections



- Enrollment declining at a rate of 1.37% to 2.21% annually
- Planned capacity = projected enrollment (5 year) plus 10%
- Enrollment projections past 5 year not reliable



**EDUCATIONAL & FUNCTIONAL DEFICIENCIES**

# Loyalsock Valley Elementary School

- STEM Lab
- Proper Classroom Storage
- Adequate sized Library
- Separate Gymnasium
- Adequate sized kitchen
- Secure vestibule entry
- Adequate space for Administration & Nurse
- Office/Small Group Instruction
- Conference Room
- Sensory Room
- Building Storage
- Separate Bus Loop and Parent Drop-off
- Playground enclosure fence



## Lyter Elementary School

- STEM Lab
- Office/Small Group Instruction
- Conference Rooms
- Sensory Room
- Building Storage
- On site Parent Drop-off
- Playground enclosure fence





- Large Group Instruction Room
- Choral Classroom
- 21<sup>st</sup> Century Library
- Poor site vehicular circulation
- Outdoor learning space



- Quantity of Student Lockers
- Parking





## District Administrative Offices

- Additional Offices
- Secure Vestibule
- Records Storage
- Public waiting & toilets
- Parking



**EXISTING FACILITY CONDITIONS**



## District Facilities

	Original Date of Construction	Most Recent Renovation/Add.	Years since last Renovation/Add.
Loyalsock Valley Elem. School	1961	1983	37
Lyter Elementary School	1958	1998	22
C.E. McCall Middle School	1972	2010	10
Montoursville Area High School	1931	2017	3

- Resurface paving
- Replace exterior & interior doors
- Address humidity issues
- Replace majority of finishes
- Renovate toilet rooms
- Replace classroom casework
- Replace food service equipment
- Abate asbestos materials (floor tile)



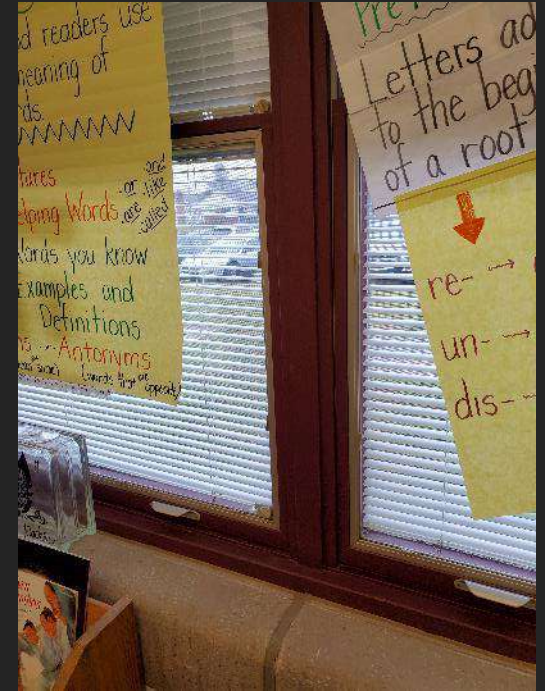


- Replace entire HVAC system
- Replace plumbing piping system
- Replace plumbing fixtures
- Replace power and emergency power system
- Provide LED lighting (partial)
- Replace PA, Clock, & Bell systems
- Replace fire alarm system



- Replace concrete walks
- Replace playground equipment
- Replace exterior windows
- Minor finish replacement (carpet, kit. ceiling, plaster)
- Replace original doors & frames
- Replace door hardware throughout
- Renovate non-ADA compliant toilet rooms
- Replace walk-in cooler & freezer

## Lyter Elementary School





- Replace HVAC temperature controls
- Provide air conditioning
  - Replace Gym & Library air handling units
  - Replace classroom unit ventilators
  - Upgrade electrical service
- Replace hot water boilers
- Replace toilet room exhaust fans
- Replace cast iron storm piping
- Replace original plumbing fixtures
- Provide mixing valves on sinks
- Replace fire alarm, clock, bell, & intercom systems
- Replace light fixtures with LED (partial)
- Install lighting controls



- Install under field drainage for soccer field
- Repair storage buildings (roof/walls)
- Replace ceramic tile in locker rooms
- Replace gymnasium equipment
- Replace TV studio AV equipment
- Refurbish or replace corridor lockers
- Replace domestic hot water heater
- Move locker room shower drains
- Replace lighting with LED (partial)
- Install lighting controls



## Montoursville Area High School

- Paint stadium concessions/locker building
- Install railing at Tech Ed pathway
- Replace maintenance building roof
- Paint main gymnasium (ceiling/structure)
- Repair Auditorium flooring
- Replace faucets on solid surface lavatories





**COST TO UPGRADE**

# Cost to Upgrade to Current Standards

Loyalsock Valley Elementary School				
ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS				
		COST RANGE		
Sitework		\$360,250	-	\$414,288
Building Exterior		\$90,500	-	\$104,075
Building Interior		\$1,193,754	-	\$1,372,817
Specialties & Equipment		\$210,000	-	\$241,500
Building Systems - HVAC		\$1,432,200	-	\$1,647,030
Building Systems - Plumbing / Fire Protection		\$358,050	-	\$411,758
Building Systems - Electrical		\$1,309,440	-	\$1,505,856
SUBTOTAL		\$4,954,194	-	\$5,697,323
	Estimating Contingency	\$495,419	-	\$569,732
TOTAL ESTIMATED CONSTRUCTION COSTS		\$5,449,613		\$6,267,055

# Cost to Upgrade to Current Standards

Lyter Elementary School				
ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS				
		COST RANGE		
Sitework		\$195,125	-	\$224,394
Building Exterior		\$279,200	-	\$321,080
Building Interior		\$391,805	-	\$450,576
Specialties & Equipment		\$120,000	-	\$138,000
Building Systems - HVAC		\$1,955,400	-	\$2,248,710
Building Systems - Plumbing / Fire Protection		\$88,000	-	\$101,200
Building Systems - Electrical		\$1,440,535	-	\$1,656,615
SUBTOTAL		\$4,470,065	-	\$5,140,575
	Estimating Contingency	\$447,007	-	\$514,057
TOTAL ESTIMATED CONSTRUCTION COSTS		\$4,917,072	-	\$5,654,632

# Cost to Upgrade to Current Standards

C.E. McCall Middle School				
ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS				
		COST RANGE		
Sitework		\$250,000	-	\$287,500
Building Exterior		\$25,000	-	\$28,750
Building Interior		\$42,000	-	\$48,300
Specialties & Equipment		\$250,000	-	\$287,500
Building Systems - HVAC		\$0	-	\$0
Building Systems - Plumbing / Fire Protection		\$62,000	-	\$71,300
Building Systems - Electrical		\$425,000	-	\$488,750
SUBTOTAL		\$1,054,000	-	\$1,212,100
	Estimating Contingency	\$105,400	-	\$121,210
TOTAL ESTIMATED CONSTRUCTION COSTS		\$1,159,400	-	\$1,333,310

# Cost to Upgrade to Current Standards

Montoursville Area High School				
ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS				
		COST RANGE		
Sitework		\$6,000	-	\$6,900
Building Exterior		\$91,440	-	\$105,156
Building Interior		\$59,850	-	\$68,828
Specialties & Equipment		\$0	-	\$0
Building Systems - HVAC		\$0	-	\$0
Building Systems - Plumbing / Fire Protection		\$8,400	-	\$9,660
Building Systems - Electrical		\$0	-	\$0
SUBTOTAL		\$165,690	-	\$190,544
	Estimating Contingency	\$16,569	-	\$19,054
TOTAL ESTIMATED CONSTRUCTION COSTS		\$182,259	-	\$209,598

# Cost to Upgrade to Current Standards

District Administrative Offices				
ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS				
		COST RANGE		
Sitework		\$0	-	\$0
Building Exterior		\$0	-	\$0
Building Interior		\$31,500	-	\$36,225
Specialties & Equipment		\$0	-	\$0
Building Systems - HVAC		\$0	-	\$0
Building Systems - Plumbing / Fire Protection		\$0	-	\$0
Building Systems - Electrical		\$0	-	\$0
SUBTOTAL		\$31,500	-	\$36,225
	Estimating Contingency	\$3,150	-	\$3,623
<b>TOTAL ESTIMATED CONSTRUCTION COSTS</b>		<b>\$34,650</b>	<b>-</b>	<b>\$39,848</b>

## Cost to Upgrade to Current Standards

Loyalsock Valley ES	\$5.5 M - \$6.3 M
Lyter Elementary School	\$5.4 M - \$6.3 M
C.E. McCall Middle School	\$1.2 M - \$1.3 M
Montoursville Area HS	\$180 K - \$206 K
District Admin Offices	\$ 35 K - \$ 40 K



**SUMMARY & NEXT STEPS**

# Summary of Needs

	MAJOR NEED	MODERATE NEED	MINOR/NO NEED
Existing Building Capacity			Loyalsock Valley Elementary School Lyter Elementary School C.E. McCall Middle School Montoursville Area High School
Projected Enrollment Capacity			Loyalsock Valley Elementary School Lyter Elementary School C.E. McCall Middle School Montoursville Area High School
Educational & Functional Deficiencies	Loyalsock Valley Elementary School	Lyter Elementary School C.E. McCall Middle School	Montoursville Area High School
Existing Facility Conditions	Loyalsock Valley Elementary School	Lyter Elementary School	C.E. McCall Middle School Montoursville Area High School
Operational Efficiencies		Lyter Elementary School Loyalsock Valley Elementary School	C.E. McCall Middle School Montoursville Area High School

## Next Steps

- School Board & Public input on analysis & need
- Develop Construction Options to meet needs
- Present Options to School Board & Public for input
- Determine recommended option



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