Bald Eagle Area School District

District Wide Feasibility Study

February 27, 2018

CRA Project No. 3097

Crabtree, Rohrbaugh & Associates
Architects
401 East Winding Hill Road
Mechanicsburg, Pennsylvania 17055
phone: (717) 458-0272 - fax: (717) 458-0047

TABLE OF CONTENTS

TABLE OF CONTENTS

SECTION 1 - FORWARD

Crabtree, Rohrbaugh & Associates is pleased to present this Facilities Study Report to the Bald Eagle Area School District. This report has been developed to assist the School District Board of Directors, staff and community in the decision making process regarding the future utilization and disposition of its educational facilities. Additionally, the report will provide an update as to the current overall status of the school district, with respect to demographics and enrollment, as well as the current status of district wide facilities.

As such, this report should be viewed as a starting point, or benchmark; providing a framework from which both a short and long term facilities master plan can be implemented for any recommended or desirable facility improvements. Any recommendations that result in upgrades to the present facilities should be structured to align with the School District's Mission, Beliefs and Educational Programs.

Crabtree, Rohrbaugh & Associates Report Team

- Rick LeBlanc
  Director of Design, Crabtree Rohrbaugh & Associates
- Todd Vukmanic
  Senior Project Manager, Crabtree Rohrbaugh & Associates
- Rob Pillar
  Director of Educational Architecture, Crabtree, Rohrbaugh & Associates
- Jim Kosinski
  Tower Engineering Company

"Society is changing rapidly and education is being challenged to follow suit. As we expand our knowledge of how we learn, we must also expand our concept of what constitutes a stimulating and creative learning environment. The single most difficult task in this transformative process is that of altering the public's image of a school facility. Expanding the planning and design process to involve all of the stakeholders and incorporate the societal issues of today makes sense."

"At Crabtree, Rohrbaugh & Associates, we believe in a transparent educational facility design process, with a learner-centered focus and client driven, collaborative approach, one which builds and supports community linkages, an important step in the transformation process.

"As such, the information contained within this report is to be considered as preliminary information, providing a benchmark from which more detailed planning and informed decision-making can begin.

Principles of the Report

In the Commonwealth of Pennsylvania, the Departments of Education, Environmental Protection and Labor & Industry have established guidelines for school programs, school sites, buildings and supporting facilities needed to provide a well-rounded, complete and safe educational experience for the students. These guidelines include:

- Curriculum regulations, including Chapter 4 standards that will continue to impact facilities.
- School sites must be of adequate size to provide for the safety of the students, provide outdoor play areas, bus loading and unloading and parking for staff and visitors.
- Learning environments should be learner-centered, developmentally and age appropriate, safe, comfortable, accessible, flexible, and equitable, in addition to being cost effective.
- School facilities should meet the educational, physical, intellectual, social and emotional needs of students and create an environment that will encourage students to learn.
- Flexibility, including spaces to provide for the various teaching and learning styles, is essential to educational facilities.

Assumptions

General

- The Bald Eagle Area School District desires to provide an educational opportunity for all students and will support the limited funding required to maintain quality educational environments at all levels.
- The goal of this report is to provide the Bald Eagle Area School District with an overview and evaluation of the current district educational facilities, including an evaluation of school district demographics and enrollment, as well as a review of each physical plant and any educational related needs, and a comparison of options that address any identified needs.

Organization / Academic

- Providing space for special programming, social services, special education and specialty programs such as art, music, reading support and other resource activities will reduce the functional capacity of the school buildings.
- The class size guidelines of the Bald Eagle Area School District will have an effect on the functional capacity of the facilities.
- As teaching strategies change and programs are adjusted to meet the different learning styles of students, facilities are affected. Some students learn best in large groups, while others learn best in visual presentations or through written or spoken communications. Having a school

environment that allows for these various types of learning and demonstration of competencies, requires flexibility and adaptability of physical space.

District Facilities

- The District's school facilities should be safe and accessible to all students and adults, be adequately sized to meet educational planning standards and criteria, and provide for a comfortable environment to facilitate year-round use and the inclusion of technology as a teaching tool.

- The District's school facilities should include a variety of learning spaces such as instructional classrooms, small and large group learning areas, specialized instruction space and laboratories.

- The facility sites should be safe and accessible and provide for efficient and safe movement of vehicular and pedestrian traffic. Adequate parking and bus drop-off areas should be provided and ideally separated to insure safety and efficiency. Athletic fields and playgrounds should be provided to reinforce the educational program.

- Each school should be a permanent part of the community. The potential use of temporary classroom units should be considered as short-term solutions only.

- The District's elementary school should provide opportunities for students to have hands-on experiences as part of the learning process, which requires adequate space.

- The Middle School experience is intended to provide a transition from the self-contained, nurturing environment of the elementary school to the departmental configuration of the high school. Students are introduced to departmental teaching, interdisciplinary teaching, flexible scheduling, collaborative learning, and flexible grouping. As an educational facility the Middle School should support and enhance the needs of young adolescent students such as, diversity in experiencing teaching, curriculum and scheduling, self exploration and self definition, meaningful participation in school and community, need for physical activity, positive social interaction with peers and adults, and the need for structure and clear limits.

- The High School is dedicated to the concept of group instruction, however must have the facilities to reinforce the emphasis on individualized learning that has emerged. New courses of study and expansion and development of educational curriculum offerings in the high school have created the need for more specialized rooms, often requiring larger, more flexible space.

- The appearance of the District's facilities provides a first and lasting impression of the school system to both children and adults. The quality of the educational opportunities is inferred. Continuing efforts should be made to maintain the interior and exterior of all school facilities.

PDE REQUIREMENTS

The following list summarizes the nature and content of the study as required by the Pa Department of Education.

Section 3 –

1 Overview of the school district including such factors as geography, population and wealth. Overview of the school district including such factors as any distinguishing characteristics that will have an impact on facilities such as geographically separate population centers.

Overview of the school district's educational program that highlights any special facility needs including any instructional practices or planned curriculums that will require special design features

2 An analysis of projected enrollment

3 A review as to whether projections 5 to 10 years into the future are reasonable and reliable

Section 4 -

4 The likely enrollment for each building and for each grade structure

Section 5 -

5 An analysis of each building's capacity as it relates to the educational program including, not only how many students can building house, but if each building provides the types of educational space dictated by the educational program

Section 6 -

6 An analysis of each building's physical condition including the condition and projected useful life of each building's major components (heating, ventilation, air conditioning, plumbing and electrical), any code related issues, whether the building is accessible, structurally sound and energy efficient.

Section 7 -

7 Costs to upgrade each building to current standards

8 An analysis of construction options including the pros and cons of each alternative

9 Cost estimates for each option

Section 8 –

10 Educational Curriculum and Special Education Requirements.

Section 9 –

11 Documentation regarding the author's credentials.

SECTION 2 - EXECUTIVE SUMMARY

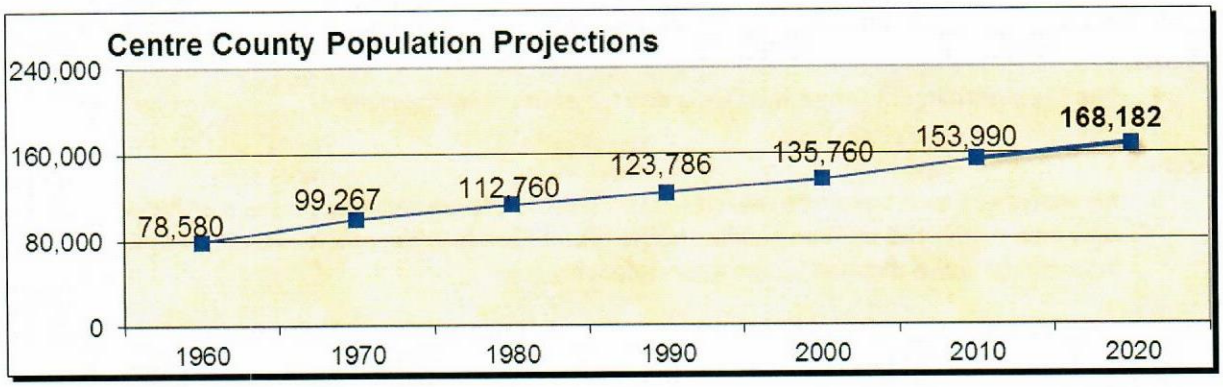
Introduction

The goal of this District Wide Feasibility Study is to provide the Bald Eagle Area School District (BEASD) with an overview and evaluation of district facilities, program deficiencies, as well as a review of facility options that can be developed to address both short term and long term identified facility needs. As such, this report is developed to provide the School Board of Directors with information and resources to be able to implement a long range plan to guide facility decisions.

Below is a brief summary of the information contained within this report.

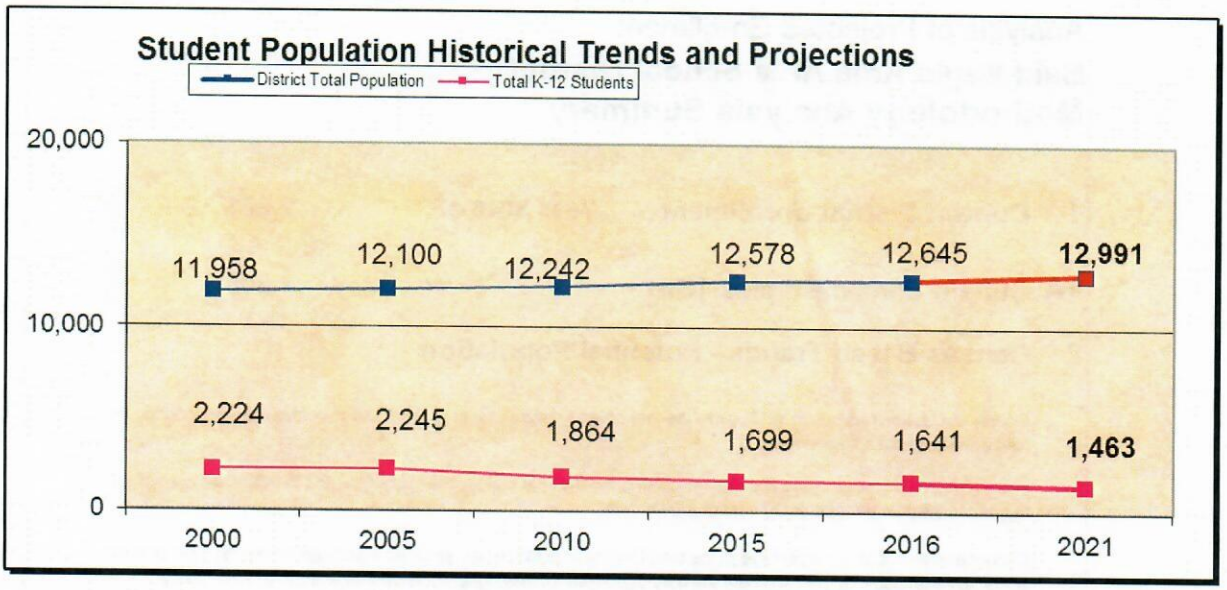
A. Demographics

- County population has consistently increased in population an average of 11.55% each decade from 1990 - 2010. Projections through 2020 and beyond indicate continued increase.



- District (Local) population has also consistently increased in population an average of 3.8% each decade from 1990 - 2010. Projections through 2020 and beyond indicate continued increase. The local population is increasing at a slower rate than the county, and the student population as a percentage of the local population has decreased at a rapid pace.

HISTORICAL TREND - PROJECTION METHOD						Projections
	2000	2005	2010	2015	2016	2021
District Total Population	11,958	12,100	12,242	12,578	12,645	12,991
increase from previous decade		1.2%	1.2%	2.7%	0.5%	3.3%
District Total K-12 Students	2,224	2,245	1,864	1,699	1,641	1,463
rate of increase/decrease from prev. interval		**0.9%**	**-17.0%**	**-8.9%**	**-3.4%**	**-10.9%**
student increase / decrease per year		0.19%	-3.39%	-1.77%	-0.68%	-2.17%
% Students *per* Population	**18.6%**	**18.6%**	**15.2%**	**13.5%**	**13.0%**	**11.3%**
			Historical average:	**16.5%**		
	5 year change:	0.0%	-3.3%	-1.72%	-0.53%	-1.72%
	15 year average percentage change 2000-2015			1.6%		



- From 2000 – 2015 student enrollment in the District decreased 525 students or a 23.6% decrease. Within the past five (5) year period, the District has seen a decrease of 165 students or an 8.9% decrease.

Analysis of Projected Enrollment

Bald Eagle Area Area School District
Methodology Analysis Summary

1	**Current District Enrollment**	Year **2016-17**	**1,641**
1A	Current Enrollment plus 10%		**1,805**
2	**Census Based Trends - Potential Population**		

County population has continued to grow the last several decades,and is projected to continue to grow during the next decade yet at a slower rate.

Local (District) population has also continued to grow over the last several decades, and is projected to continue to grow in the next decade yet at a much slower rate.

District enrollment as a percentage of the total District population has declined significantly over the past several years. Maintaining this ratio, indicate the district enrollment may continue to decrease through 2021 as the relationship between local District population and the number of students continues to decrease.

	Students projected by Census Based Trends:		
		Year **2021**	**1,464**
2A	**Census Based Trends - Potential Population** Applying Annual Rates		
		Year **2021**	**1,510**
3	**PA Dept. of Education Enrollment Projections**		
		Year **2021**	**1,483**
4	**Cohort Survival Projections**	Year **2021**	**1,536**

PDE's projections differ only slightly from the census based trends method (27 students). Given the relatively consistent decline in live births in the municipalities within the district it may be reliable to apply a consistent rate to determine projected enrollment. This method results in a slightly higher total enrollment compared to the PDE projections and may provide a reasonable enrollment for planning purposes

B. Benchmark Analysis

Comparing information against regional averages allows the district to quantify targeted metrics. Two metrics that are relevant in a facilities assessment are: Area per Student and Utilization of Space.

Area per Student		Current				Projected		
School	Area (SF)	Curent enrollment	Area per student current (SF)	Area per student benchmark (SF)*	Delta (SF)	Project enrollment	Area Per student projected	Delta (SF)
Mountaintop	37,594	132	285		134	122	309	158
Port Matilda	27,945	125	224		73	115	242	91
Howard	17,527	91	193	151	42	84	209	58
Wingate	93,800	352	266		115	325	289	138
Elementary Total	176,866	700	253		102	646	274	123
Bald Eagle HS/MS	174,187	936	186	183	3	864	202	19
Total	351,053	1636				1510		

Projected area required at benchmark (SF)	255,655
Projected excess (SF)	95,398
median cost operations and Maintenance cost per SF**	$ 4.42
Annual cost spent operating and maintaining excess space	$421,658

Scources:
* School Planning and Management Annual School Construction Report region 2 average for years 2002 - 2015
** American School and University 38th Annual Maintenance & Operations Cost Study for Schools (2009)

Area per student Analysis indicates that the District's facilities are currently significantly above the benchmark. Declining enrollment will increase the difference. The analysis indicates that the district could have as much as 101,719 excess square feet as compared to the benchmark. Assuming an annual operations and maintenance cost of $4.42 would mean that the District could be spending as much as $449,597 annually operating and maintaining unnecessary space.

Capacity and utilization analysis

K-5 Elementary Schools — **K-5**

School	Current Bldg Capacity*	Current 10/2016 Enrollment	Current Utilization Current Enrollment	2021 Projection	Projected Utilization PDE 2020 Enrollment	Projected Current Enrollment Plus 10%	Projected Utilization Current Enroll + 10%	Utilization Benchmark	Additional Space Required ?
Mountaintop Area ES	200	132	66%	122	61%	145	73%	90% - 95%	No
Port Matilda ES	175	125	71%	115	66%	138	79%		No
Howard ES	150	91	61%	84	56%	100	67%		No
Wingate ES	475	352	74%	325	68%	387	82%		No
	1,000	**700**	**70%**	**646**	**65%**	**770**	**77%**		
Capacity Available***		*300*		*354*		*230*			

6-12 Middle School/ High School — **6-12**

School	Current Bldg Capacity	Current 5/2016 Enrollment	Current % Full Current Enrollment	2021 Projection	Projected % Full PDE 2020 Enrollment	Projected Current Enrollment Plus 10%	Projected % Full Current Enroll + 10%	Utilization Benchmark	Additional Space Required ?
Bald Eagle MS/HS	1,549	936	60%	864	56%	1030	66%	80-85%	No
	1,549	**936**	**60%**	**864**	**56%**	**1,030**	**66%**	**0%**	
Capacity Available***		*613*		*685*		*519*			

Space utilization analysis indicates that the district currently has 20%-25% excess capacity at the elementary level and 20% - 25% additional capacity at the Middle and High school level when compared to benchmark. As enrollment continues to decline utilization will also decline.

C. Building Assessments

The Pa Department of Education requires that each district facility study identify items that are required to bring District buildings up to current construction standards. It should be noted that existing conditions that would not comply with current Codes are frequently grandfathered by the local Code Authority and would need to be upgraded to current Codes during a major construction project or due to the need for replacement. Other critical issues which we evaluate include life safety and building code compliance, handicap accessibility (ADA), energy efficiency, structural systems and aesthetics.

Included in this report is a matrix which analyzes each building's physical condition including the projected useful life of each building's major architectural and building systems components, whether the building is accessible, structurally sound, energy efficient, ADA and building code compliant. Site investigations were conducted to evaluate various site, architectural, plumbing, heating, air conditioning, ventilation, electrical power and special systems at each building.

Below is an excerpt of the building assessment matrix contained within this report.

Bald Eagle Area SD - Building Assessment Matrix

1	Site	District Administration	Bald Eagle HS/MS	Howard ES	Mountain Top ES	Port Matilda ES	Wingate ES
1.1	Site Size / Acreage	214 acres (shared with Bald Eagle MS/HS and Wingate ES)	214 acres (shared with DAO and Wingate ES)	6 acres	20 acres	5 acres	214 acres (shared with DAO and Bald Eagle MS/HS)
1.2	Overall Condition	Good	Good	Fair	Fair	Fair	Good
1.3	Topography						
	Contours	Building on flat pad	Slopes; building on flat pad	Slopes; building on flat pad	Slopes from front to back, building on flat pad	Slopes from side to side	Slopes; building on flat pad
	Room for Additions?	Yes	Yes	Minimal	Minimal	Yes	Yes
	Adequate Drainage?	Yes	Yes	Yes	Yes	Yes	Yes
1.4	Site Circulation						
	Bus/Vehicle Separation?	N/A	Yes	N/A	No	Yes	Yes
	Receiving?	N/A	Yes	Yes, but adjacent to play area	Yes, but adjacent to play area	Yes, but adjacent to play area	Yes
1.5	Site Entrance						
	Easy Access?	Yes - (1) Main entrance	Yes - (3) entrances/exits	Yes - (2) entrances/exits	Yes - (2) entrances/exits	Yes - (2) entrances/exits	Yes - (2) entrances/exits
1.6	Parking & Sidewalks						
	Condition	Good	Good	Fair	Fair	Fair	Good
	Sufficient Spaces	Yes	Yes	No	Yes	Yes	Yes
1.7	Play Areas						
	Hard & Soft Surfaces?	*Not applicable*	*Not applicable*	Yes	Yes	Yes	Yes
	Equipment Condition?	*Not applicable*	*Not applicable*	Fair	Fair	Fair	Good

Bald Eagle Area SD - Building Assessment Matrix

4	MEP	District Administration	Bald Eagle HS/MS	Howard ES	Mountain Top ES	Port Matilda ES	Wingate ES
4.1	HVAC Systems	The HVAC system was installed in 2015 as part of a performance contract. It consists of a variable refrigerant flow system for primary heating/cooling and an energy recovery unit for ventilation. Additional heat is provided via radiant ceiling panels in perimeter rooms.	The HVAC system received a comprehensive renovation in 2009. Primary heat addition and rejection is via a geothermal ground loop that is shared with Wingate Elementary School. The system has both horizontal heat pumps (above ceilings) and floor mounted unit ventilation heat pumps. Additionally, the building has a 20 year old 4-pipe system that serves existing classroom and library unit ventilators, along with existing air handling units. This system has gas-fired boiler and a chiller.	The HVAC system was replaced in 1993, and upgraded as part of a 2010 performance contract to include cooling in educational spaces. The building is heated with cast-iron sectional boilers installed in 1993, and cooled with an air cooled chiller installed in 2010. Classrooms have floor mounted unit ventilators, each with independent hot and chilled water coils.	The HVAC system was fully replaced in 1997. In 2007 the central plant was upgraded as part of a performance contract to be a geothermal system. This included the installation of a wellfield and a multi-stack boiler/chiller unit that connected to the building's existing piping distribution system. The boiler/chiller requires manual changeover and does not consistently start in the winter with low water temperatures, necessitating the continued use of an inefficient oil fired boiler. Loop temperatures go below freezing, decreasing system operating efficiency. Classrooms have floor mounted unit ventilators from 1997 as well as the library, gymnasium and teachers work room HVAC systems.	The HVAC system received a comprehensive renovation in 1999. The system is geothermal with horizontal heat pumps above ceilings and floor mounted unit ventilator heat pumps. The heat pump refrigeration systems are in poor condition and have been problematic. Controls are standalone with no central DDC panel. The pumping system is constant speed.	The HVAC system received a comprehensive renovation in 2009. Primary heat addition and rejection is via a geothermal ground loop that is shared with the High/Middle School. The system has both horizontal heat pumps (above ceilings) and floor mounted unit ventilation heat pumps.

D. Facility Options / Estimated Costs

Crabtree, Rohrbaugh & Associates has developed these preliminary facility options and recommendations for the School District facilities, to assist the Dallastown Area School District Board of Directors and administration in the decision-making process regarding the future utilization of the educational buildings.

As such, this report should be viewed as a starting point, or benchmark; providing a framework from which decisions regarding prioritized facility upgrades can be made. Any recommendations that result in upgrades to the present facilities should be structured to align with the School District's Mission, Beliefs and Educational Programs.

The information presented outlines various options that the Dallastown Area School District can take to address the more pressing facility needs at the K-3 buildings and other facility needs at other district buildings.

	1	2		3	5	6	7	8	9	10	11	12	13	14	15	16	17
	Building	Project Type	Year Built (Alts & Adds)	Current Enroll	Current Capacity	Planned Capacity	Exist Bldg SF	New Addition	New Tot Area	New Const Costs*	Renovation Const Costs	Site Costs	Const Related Soft Costs	Contingency / Escalation	High Range Const Costs	Project Soft Costs	High Range Project Costs
	Option 1																
1	Howard ES	Renovation	1922 (1956, 1970, 1980)	79	150	150	17,527		17,527	$ -	$ 1,490,846	$ 350,378	$ [illegible]	$ 172,840	$ 2,091,850	$ 282,207	$ [illegible]
2	Mountaintop Area ES	Renovation	1962 (1970, 1984)	535	200	200	37,594		37,594	$ -	$ 2,504,685	$ 70,605	$ 109,059	$ 167,820	$ 2,502,509	$ 348,824	$ 2,851,333
3	Port Matilda ES	Renovation	1965 (1971, 1998)	120	175	175	27,945		27,945	$ -	$ 2,387,233	$ 146,000	$ 189,739	$ 177,326	$ 2,900,298	$ 391,540	$ 3,291,838
4	Wingate ES	Renovation	1953 (1982, 1987, 1990)	358	600	600	93,800		93,800	$	$ 1,516,566	$ 700	$ 113,872	$ 106,142	$ 1,736,031	$ 231,364	$ 1,970,395
5	Wingate MS / HS	Renovation	1956 (63, 93, 75, 01, 08)	829	1,391	1,391	276,137		276,137	$	$ 4,835,076	$ 19,625	$ 311,072	$ 318,799	$ 5,213,832	$ 703,827	$ 6,017,359
6	Totals			1,819	2,516	2,516	453,003		453,003	$0	$12,735,906	$599,908		$898,054	$14,443,586	$1,950,647	$16,404,228

E. Summary

The information contained within this district wide feasibility study has been developed to:

- Address the present and foreseeable projected student enrollment.
- Identify and address existing facility needs at all district owned buildings in order to renovate and modernize the facility and to extend the useful life of the physical plant and operational systems a minimum of 20 years.
- Provide preliminary construction and projecting cost information as a means of budgeting for any major project, designed to address the school district's facility needs in a prioritized and structured approach.

<u>Short - Term Life-Cycle Renewal & Capital Improvements</u>
The short-term improvements are not intended to be 20 – 25 year comprehensive building upgrades or expansion projects, rather address program enhancements or the more urgent, or critical needs of a facility; typically driven by deferred maintenance, equipment failure, non-conformance with current building codes and changes in technology.

<u>Long – Term Facility Renewal & Master Plan options</u>
The long term improvements are intended to be 20 – 25 year comprehensive building renovation and addition projects to provide capacity to each building as well as program support spaces. Each facility will need to be further evaluated for site impacts such as play area reconfiguration and meet current zoning

and stormwater management requirements. Renovations will include accessibility upgrades and also meet current building codes and ordinances.

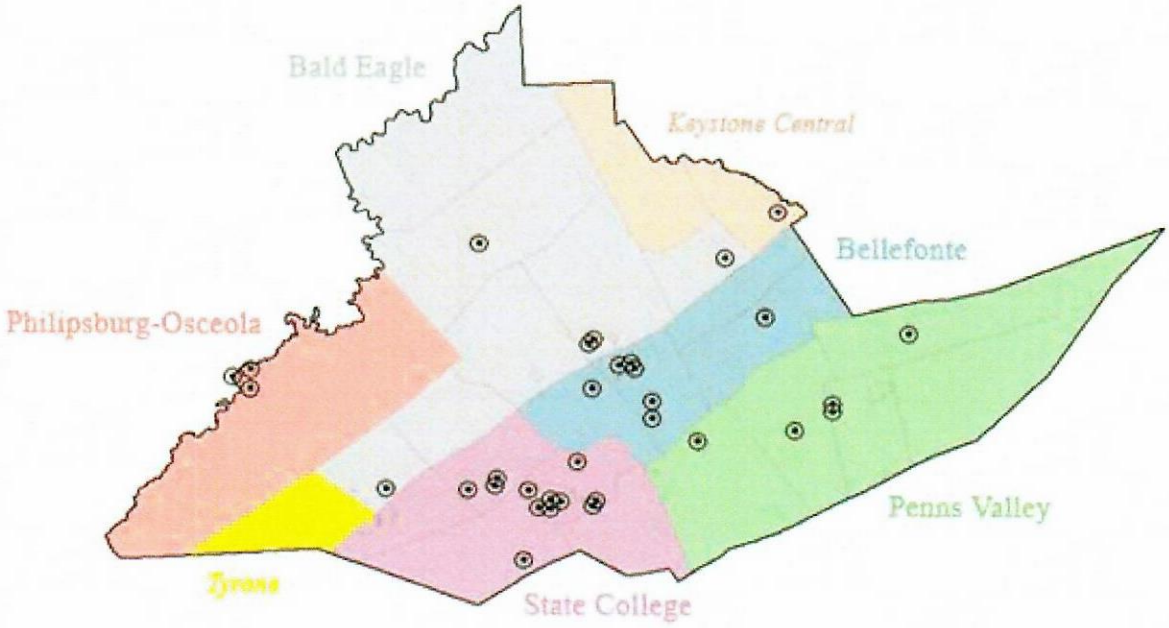
SECTION 3 - PDE Requirement

DISTRICT OVERVIEW

OVERVIEW – GEOGRAPHY, WEALTH AND POPULATION
OVERVIEW - DISTINGUISHING CHARACTERISTICS, ANY IMPACT ON FACILITIES
OVERVIEW – DISTRICT'S EDUCATIONAL PROGRAM, ANY SPECIAL FACILITY NEEDS

Geography, Distinguishing Characteristics

- The Bald Eagle Area School District is located in the northern portion of Centre County, extending north to the western branch of the Susquehanna River. Formed in 1952, the district is the largest, geographically, of the four school districts located entirely in Centre County. The District is comprised of the boroughs of Howard, Milesburg, Port Matilda, Snow Shoe and Unionville, and the townships of Boggs, Burnside, Howard, Huston, Snow Shoe, Union and Worth, and encompasses 342.6 square miles of majestic hills, rolling farmlands, and surrounds 80,000 acres of state forest. The district serves a total Local population of approximately 13,389 persons according to the 2010 Census. This was a 3.9% increase over the 12,882 persons reported in the 2000 Census. A 1.6% decrease in population with 13,181 persons was reported in the 2015 census estimates.



- The District is bordered by Clearfield County and Philipsburg – Osceola SD to the west, State College Area SD and Bellefonte Area SD to the south, Keystone Central SD to the East, and Clinton County to the North. Bald Eagle School District is the largest school district in Centre County in terms of geographical area.

- The Bald Eagle valley runs across the southern portion of the District, with foothills leading to the Appalachian Plateau in the north of the District.

- The District facilities currently include four (4) elementary schools for grade levels K-5, one (1) Middle School for grade levels 6-8, and one (1) high school for grade levels 9-12. Wingate Elementary School, Bald Eagle Middle School, and Bald Eagle High School are co-located in one facility in the center of the district. The district administrative office is located across the street from the high school campus.

Wealth

- The following chart details the economic indicators for each of the 12 municipalities that comprise Bald Eagle Area School District:

Municipality	Median Household Income	Per Capita Income	Poverty Rate	Median Housing Values	Unemployment Rate
Boggs Township	$ 48,138	$ 21,025	15.0%	$ 139,700	5.9%
Burnside Township	$ 51,667	$ 27,791	3.1%	$ 105,100	4.4%
Howard Borough	$ 49,375	$ 23,542	5.9%	$ 155,400	3.3%
Howard Township	$ 61,563	$ 30,411	7.8%	$ 105,300	7.0%
Huston Township	$ 58,393	$ 27,587	11.2%	$ 162,600	5.5%
Milesburg Borough	$ 52,708	$ 30,541	22.7%	$ 140,800	5.2%
Port Matilda Borough	$ 56,786	$ 25,901	9.0%	$ 96,300	4.9%
Snow Shoe Borough	$ 54,479	$ 21,976	14.0%	$ 110,300	2.4%
Snow Shoe Township	$ 55,625	$ 24,438	8.5%	$ 120,200	1.5%
Union Township	$ 60,917	$ 26,084	4.8%	$ 156,900	4.1%
Unionville Borough	$ 39,500	$ 24,046	9.2%	$ 133,300	5.6%
Worth Township	$ 59,844	$ 27,155	7.0%	$ 174,400	3.6%
District Average	***$ 54,083***	***$ 25,875***	***9.9%***	***$ 133,358***	***4.5%***
Centre County	$ 52,186	$ 26,492	19.3%	$ 197,200	3.0%
Pennsylvania	$ 53,599	$ 29,291	13.5%	$ 166,000	5.0%

* Source: American Fact Finder US Census Bureau 2011-2015 American Community Survey 5-year estimates

- Boggs Township, Burnside Township, Howard Borough, and Unionville Borough reported having a median household income* lower than the Pennsylvania median household income levels ($53,599) and that of Centre County ($52,186). The average median household income level amongst all municipalities is $54,083.

  Howard Township had the highest median household income at $61,563 followed closely by Union Township at $60,917.

  Unionville Borough had the lowest median household income level at $39,500 followed by Boggs Township at $48,138.

- Of the District municipalities, Milesburg Borough has the highest per capita income at $30,581 while Boggs Township has the lowest per capita income at $21,025. The average per capita income amongst all municipalities is $25,875.
  - The 2011-2015 American Community Survey 5-year estimates data indicated that 9.9% of the total District Local population of residents were living below the poverty level.

Milesburg Borough has the highest poverty rate at 22.7%, Burnside Township the lowest at 3.1%.

- All municipalities with the exception of Worth Township in the Bald Eagle Area SD reported having a median housing value* lower than Pennsylvania median housing values ($166,000) and that of Centre County ($197,200). The average median housing value amongst all municipalities is $133,358.

  Worth Township had the highest median housing value at $174,400 followed by Huston Township at $162,600.

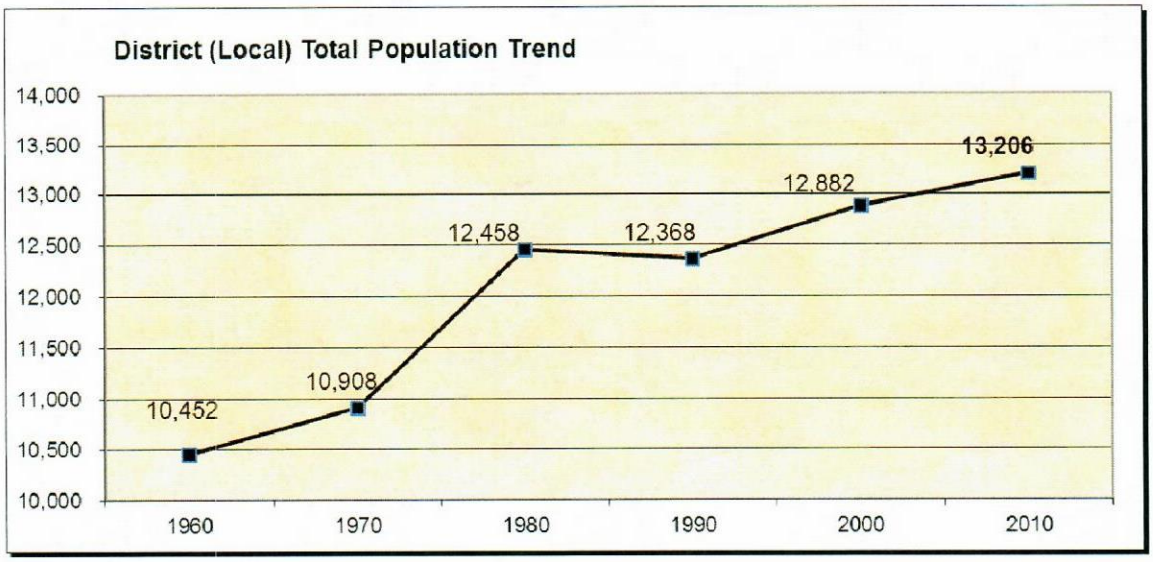
  Port Matilda Borough had the lowest median housing value at $96,300 followed by Burnside Township at $105,100.

  - The District municipal unemployment rate reported in the 2011-2015 American Community Survey 5-year estimates was at 4.5%, lower than the state rate at 5.0% and that of the county rate at 3.0%.

Population

- The following chart details the total population trends from 1960- 2010 for each of the 12 municipalities that comprise Bald Eagle Area School District according to the US Census Bureau:

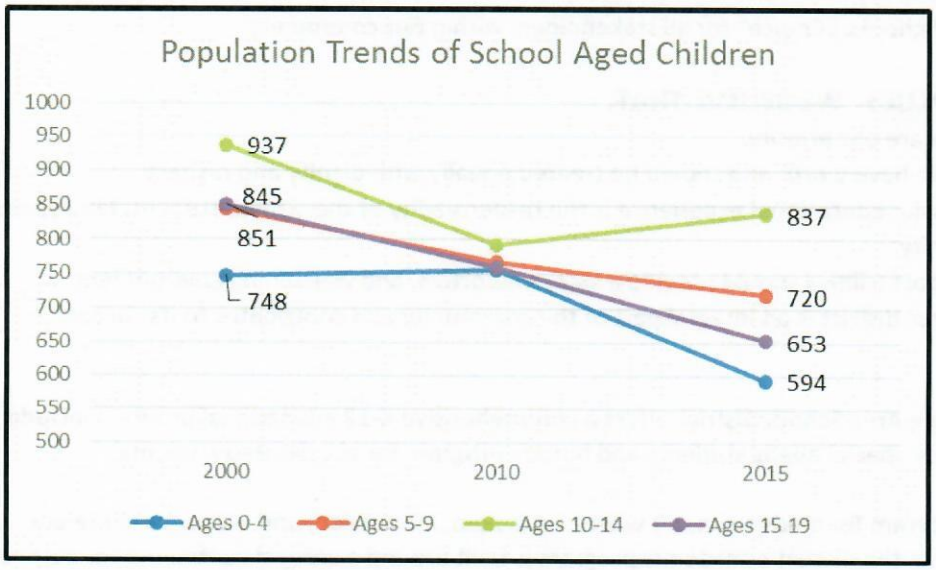
Municipality	1960	1970	1980	1990	2000	2010
Boggs Township	1,924	2,039	2,246	2,686	2,834	2,985
Burnside Township	463	430	472	390	410	439
Howard Borough	770	751	838	749	699	720
Howard Township	797	732	912	1,004	924	964
Huston Township	661	837	1,222	1,282	1,311	1,360
Milesburg Borough	1,158	1,196	1,309	1,144	1,187	1,123
Port Matilda Borough	697	680	655	669	638	606
Snow Shoe Borough	714	874	852	800	771	765
Snow Shoe Township	1,877	1,710	1,877	1,756	1,760	1,746
Union Township	663	809	1,139	895	1,200	1,383
Unionville Borough	371	375	353	284	313	291
Worth Township	357	475	583	709	835	824
District Total Pop.	**10,452**	**10,908**	**12,458**	**12,368**	**12,882**	**13,206**
rate of increase/decrease		4.4%	14.2%	-0.7%	4.2%	2.5%
increase/decrease		456	1,550	(90)	514	324



- The District population grew at a rate of 3.9% from 2000 to 2010. However, there was a 1.6% decline from 2010 to 2015 according to the US Census bureau.
- Milesburg Borough experienced the highest decline at 25.7% while Snow Shoe Borough experienced a 31.2% increase in population.

The following chart details population trends for school aged children from 2000- 2015 for Bald Eagle School District according to the US Census Bureau:

Pupulation Trends of School Aged Children							
Ages 5-9	2000	2010			2015		
	Total	Total	2000-2010 Change	2000-2010 Percent	Total	2010-2015 Change	2010-2015 Percent
Ages 0-4	748	756	8	1.1%	594	-162	-21.4%
Ages 5-9	845	768	-77	-9.1%	720	-48	-6.3%
Ages 10-14	937	793	-144	-15.4%	837	44	5.5%
Ages 15 19	851	761	-90	-10.6%	653	-108	-14.2%



- The population of children aged 0-4, declined by 21.4% between 2010 and 2015.
- The population of children aged 5-9 declined 6.3% between 2010 and 2015.
- The population of children aged 10-14 increased 5.5% between 2010 and 2015.
- The population of children aged 15-19 declined 14.2% between 2010 and 2015.

State Financial Aid

- The current (2017-2018) financial aid ratio utilized by the Bald Eagle Area School District, as determined by the Pennsylvania Department of Education is the **Capital Account Reimbursement Fraction (CARF) - 0.7522**

District Educational Program and Facility Needs

This section analyzes the School District's Educational program/curriculum as it relates to the spaces, rooms and facilities required to implement the curriculum and highlights any special facility needs including any instructional practices or planned curriculums that will require special design features.

VISION:

- Graduate students who are sought after by schools and employers by enabling our students to acquire and transfer 21st Century knowledge skills to the real world.
- Develop respectful students whose lives demonstrate integrity.
- Include interventions and innovative styles of teaching to meet all student needs.
- Involve and communicate with our community.
- Be the "School of Choice" for all stakeholders within our community.

SHARED VALUES - WE BELIEVE THAT:

- Students are our priority.
- All people have worth and should be treated equally with dignity and respect.
- A successful educational experience is the responsibility of the school, student, family, and community.
- Our school facilities should provide a safe, supportive, and welcoming environment.
- Our school district is an integral part of the community and contributes to its success.

The Bald Eagle Area School District offers a comprehensive K-12 educational program including internal curriculum for special needs students and honors program for accelerated students.

A quality program for students result when curriculum, instruction, and assessment are one and the same. As such, the district's academic program is built around a vertical continuum for curriculum from kindergarten to grade 12.

Continuity also exists in the monitoring of curriculum to ensure that teachers within a grade level or subject area are teaching and assessing the planned curriculum.

Classroom instruction is organized to provide students a core curriculum in the sciences and the arts. English, art, music, physical education, mathematics, social studies, and the sciences are offered at all grade levels as well as remedial and enrichment programs.

Due to new knowledge and societal demands, curriculum development is a continuous process. Curriculum development is never complete until it is used in the classroom.
The District prides itself in not only providing a wide variety of courses with optimal career choices, but as important, making sure we are educating the entire child to be outstanding citizens regardless of the community in which they decide to take up residency.

Our Elementary Schools are child-centered offering a solid foundation in basic skills. The Middle School features a team teaching approach focused on the unique needs of each student. Middle School plans a strong emphasis on the math and reading/literacy skills. The High School provides many avenues to pursue from academics to the career technologies. High School students have the option to attend CPI, a very progressive career and technology center.

The District has made huge strides in technology. By years end, the District will be at a 1:1 student to computer ratio, enabling the schools to assign computers to students enhancing the day to day learning experience. In addition to the 1:1 student/computer ratio, each building is rich in technology with interactive smart boards available in most classrooms.

BEA Middle and High School

1. Facilities should support these 21st Century learning skills -critical thinking, creativity, collaboration, communication and need to be included as special needs.
2. Expansion of the District's STEM based curriculum is required with adequate lab space/work areas to accommodate the program.
3. The use of technology has grown from being a part of the curriculum to becoming a tool used in every program and integral to daily operations. With the future moving toward a one to one environment, the building must be able to accommodate the needs associated with the initiative. Facility design and modifications must incorporate adequate power and charging areas for laptops, appropriate networks, sufficient space, and proper furnishings.
4. Sufficient programmatic space to accommodate the administration and staff for adequate supervision of the daily building operations.
5. Creating a more 21st Century learning and technology based Media Center/Maker Space with areas for small and large group collaboration, breakout areas and work space with appropriate support space for technology and material storage.
6. The Large Group Instruction Room needs to have the HVAC removed from the inside of the facility to provide an acoustic atmosphere which is conducive to training and learning.
7. The Technical Education areas need to be continually updated to support the curriculum. New equipment, power, ventilation and data requirements utilized in the classroom environment shall be considered.
8. No other special design features have been identified at this time.

THIS PAGE IS INTENTIONALLY LEFT BLANK

Wingate Elementary School

1. Adequate space is required as the district continues to pursue 21st century learning skills- critical thinking, collaboration, communication along with Science, Technology, Engineering and Math (S.T.E.M.) activities. Currently the plan at Wingate is to use the Library as one of our S.T.E.M. locations creating a Makerspace facility as well as being used as a library.
2. Adequate furnishings (S.T.E.M. materials, desks, chairs and storage facilities) so that we can best provide the students with S.T.E.M. activities moving forward.
3. Blending and Personalized learning is a different mode that we will continue to move forward with in this building. This requires updated technology as well as the Infrastructure to support the use of this type of technology and learning. We currently have a strong infrastructure but it needs to be updated on a yearly basis.
4. Site Circulation- The current drop off for students by parents Is a problem. They are dropped off and must cross in front of the bus drop off lane. A circular or turn around space for parents would work much better.
5. Wingate is in need of different learning style furniture for all classrooms. Movement seating as well as modern furniture for students i.e. a must in the 21st century. Facilities should support 21st century learning skills.
6. Modern updated cafeteria seating area for students with adequate lighting and seating.
7. Updated playground area with up to date equipment as well as equipment that we can Incorporate Into our physical education program.
8. Totally updated Library which incorporated 21st century learning with seating and areas to learn. This would also include a 3d printer in this area.

No other special design features have been identified at this time.

THIS PAGE IS INTENTIONALLY LEFT BLANK

Mountaintop Area Elementary School

1. Utilize current space to best meet instructional needs as the district continues to pursue 21st century learning (critical thinking, creativity, collaboration, and communication).
2. Provide appropriate STEM equipment (tools, materials, furnishings, and storage) that best meets the needs of students and staff for current and future STEM initiatives.
3. Continue to update and support current and new technology
4. Update classroom furniture to provide for alternative learning stations and different learning styles to promote movement in the classroom and also support the use of technology.
5. Reconfigure front office areas to support main entrance security as well as the needs of the library.
6. Renovate building including restroom facilities, classrooms, common areas, etc.
7. Make necessary updates for ALICE implementation.
8. Update parking areas and bus loop and consider a no through traffic solution for bus
9. Update playground area including kick ball field.
10. Provide adequate equipment storage for custodial and maintenance staff.

No other special design features have been identified at this time.

THIS PAGE IS INTENTIONALLY LEFT BLANK

Port Matilda Elementary School

The Port Matilda Elementary School is the third largest of the four elementary schools in the Bald Eagle Area School District and houses approximately 120 students, 9 teaching staff, and 10 support and kitchen staff.

The educational core program includes classrooms from kindergarten through fifth grade. There is a comprehensive curriculum for all students, which includes the areas of Reading, Writing, Speaking, Listening, Mathematics, Social Studies, Science and Health. The itinerant staff are specialists in the areas of Counseling, Physical Education, Art and Music; they provide forty- five minutes of instruction to the students during each six-day-cycle of the schedule. In grades four through five, the students may receive instrumental lessons. Spanish instruction is provided by video for K-2 and group instruction is held for grades 3-5 monthly.

Port Matilda Elementary students have 1:1 personal laptop computers to use at school. Each classroom uses current up-to-date technology including iPads, Apple TV, and Doceri; we have interactive boards in every classroom. The library has a computerized retrieval system and uses technology for reference searches. An itinerant librarian visits the school to provide instruction in library skills and technology every other week. The Scholastic Reading Counts program is now part of our library system.

Remedial reading and math intervention programs are available in our school, along with a gifted educational program. These programs are offered to students that meet the criteria set by the school district and the state. At this time, no special education services are offered at outlying buildings except occupational, physical and speech therapy. There are 1-2 classrooms available in the event that learning support is offered in the future.

Two county agencies offer after school care and a 5-day pre-school program that are housed at the building. Many families utilize the services for child care services.

The multipurpose room is used for all events including PT, OT, cafeteria, assemblies, and night events and for physical education classes.

The elementary school benefits from an active Parent Teacher Organization. The group provides a multitude of services for students and teachers, as well as supports the many educational programs within the school. Many other groups utilize the school facilities during the evenings, providing activities for children in the community.

The school regularly supports the local community with a variety of events. We do a fall and spring food drive with donations divided up between the two local food banks in the area. We walk to the community park in the spring and fall giving parents, grandparents, and family members the opportunity to join us for time with students.

Port Matilda Elementary has earned banner status the past five years in the area of School Wide Positive Behavior. Students are rewarded for good behavior choices daily, and each month celebrate their achievements with a school wide reward. Our school motto, Be Kind, Be Respectful, Be Responsible, Be the Best You Can Be, has helped our students bring positive behavior not only into the classrooms, but into their daily lives outside of our school setting.

Equipment/Space

- The need of additional storage space to accommodate equipment and supplies could be beneficial.
- The bathrooms throughout the school are in need of upgrades and the kitchen is starting to need equipment replacement. Storage/office in gym needs to be remodeled.
- The windows and shades are in need of replacement for better insulation in rooms.
- The outside pavement and concrete could be replaced and is showing wear.
- Some classroom cabinetry needs to be replaced.
- Communication/phone system is dated.

No other special design features have been identified at this time.

Howard Elementary School

1. Adequate space is required as the district continues to pursue 21st century learning skills- critical thinking, collaboration, communication along with Science, Technology, Engineering and Math (S.T.E.M.) activities. Currently the plan at Howard is to use the Library as one of our S.T.E.M. locations creating a Makerspace facility as well as being used as a library.
2. Adequate furnishings (S.T.E.M. materials, desks, chairs and storage facilities) so that we can best provide the students with S.T.E.M. activities moving forward.
3. Howard currently has one classroom for K-5, pre-k, art/music share a classroom this consumes all classrooms being used, additional classrooms will need to be added for the potential of learning support coming to Howard Elementary and dedicate a separate classroom for Art instruction and Music instruction, which would give us an extra space to provide S.T.E.M. activities throughout the school year.
4. Site Circulation- increased parking capacity; currently the building has 15 parking stalls for 17 staff members. Several staff members park at the local church. Currently parents park along the street when dropping off and picking up students.
5. Extra storage space would be necessary as to use the entire multipurpose room for P.E. and open to public for use after school. Currently there is not a space to store tables or chairs within the building other than taking up space in the multipurpose room.

No other special design features have been identified at this time.

PENNSYLVANIA DEPARTMENT OF EDUCATION ENROLLMENT PROJECTIONS DATED 12-30-2016

pennsylvania
DEPARTMENT OF EDUCATION

Enrollment Projections
Prepared by the Pennsylvania Department of Education
(717) 787-2644

Bald Eagle Area SD 110141003

YEAR	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Actual														
2011 - 2012	135	126	133	132	136	137	143	162	134	119	167	147	163	1834
2012 - 2013	117	139	124	133	137	136	140	147	156	144	125	170	158	1826
2013 - 2014	131	115	134	122	132	136	135	139	148	157	142	121	162	1774
2014 - 2015	106	130	113	133	120	126	134	138	138	148	149	138	122	1695
2015 - 2016	130	107	128	116	132	117	127	128	132	144	147	146	145	1699
Projection														
2016 - 2017	97	121	105	128	115	129	117	127	125	136	143	145	149	1637
2017 - 2018	129	96	118	105	127	113	129	117	124	129	135	141	148	1611
2018 - 2019	113	128	94	118	104	125	113	129	115	128	128	133	144	1572
2019 - 2020	114	112	125	94	117	102	125	113	126	119	127	126	136	1536
2020 - 2021	112	113	110	125	93	115	102	125	111	130	118	125	129	1508
2021 - 2022	110	111	111	110	124	91	115	102	122	114	129	116	128	1483
2022 - 2023	108	109	109	111	109	122	91	115	100	126	113	127	119	1459
2023 - 2024	106	108	107	109	110	107	122	91	113	103	125	111	130	1442
2024 - 2025	105	106	106	107	108	108	107	122	89	117	102	123	113	1413
2025 - 2026	103	104	104	106	106	106	108	107	120	92	116	100	126	1398

Bald Eagle Area SD
110141003

Friday, December 30, 2016
Department of Education, Division of Data Quality

Various Grade Groupings of the Enrollment Projections

YEAR	K-4	K-5	K-6	K-7	K-8	K-9	K-12	5-8	6-8	7-8	6-9	7-9	7-12	8-12	9-12	10-12
2015 - 2016	613	730	857	985	1117	1261	1699	504	387	260	531	404	842	714	582	438
2020 - 2021	553	668	770	895	1006	1136	1508	453	338	236	468	366	738	613	502	372
2025 - 2026	523	629	737	844	964	1056	1398	441	335	227	427	319	661	554	434	342

Notes
1. Excludes students in full-time out-of-district special education, comprehensive AVTSs, charter schools, state-owned schools, consortium-operated alternative high schools, and juvenile correctional institutions.
2. Enrollment projections beyond five years are subject to errors in the lower grades resulting from inconsistencies between actual and projected live births and should be reviewed closely.
3. Four year old kindergarten students, if any, added to K enrollments.
4. Elementary and secondary ungraded students were distributed among the grades. Therefore, enrollments by grade may differ from those reported by the local education agencies.

Sources
1. Pennsylvania Information Management System (PIMS)
2. Resident Live Birth file supplied by the Division of Health Statistics, Pennsylvania Department of Health. The Department of Health specifically disclaims responsibility for any analyses, interpretations or conclusions.

Retention Rate by Grade by Year

	Birth to K	Birth to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12
2011-12 to 2012-13	0.82394	1.03731	0.98413	1	1.03788	1	1.0219	1.02797	0.96296	1.07463	1.05042	1.01796	1.07483
2012-13 to 2013-14	0.98496	0.80986	0.96403	0.98387	0.99248	0.9927	0.99265	0.99286	1.0068	1.00641	0.98611	0.968	0.95294
2013-14 to 2014-15	0.87603	0.97744	0.98261	0.99254	0.98361	0.95455	0.98529	1.02222	0.99281	1	0.94904	0.97183	1.00826
2014-15 to 2015-16	0.99237	0.8543	0.98462	1.02655	0.99248	0.975	1.00794	0.95522	0.95652	1.04348	0.99324	0.97987	1.05072
Average Rate	0.91933	0.92723	0.97884	1.00074	1.00161	0.98056	1.00194	0.99957	0.97977	1.03113	0.9947	0.98442	1.02169
Retention Rate Used	0.93376	0.92723	0.97884	1.00074	0.98952	0.98056	1.00194	0.99957	0.97977	1.03113	0.9947	0.98442	1.02169

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Births	134	142	133	121	131	104	138	121	122	120	118	116	114	112	110

Projected Births

Bald Eagle Area SD
110141003

Friday, December 30, 2016
Department of Education, Division of Data Quality

REVIEW WHETHER PROJECTIONS 5-10 YEARS INTO FUTURE ARE REASONABLE AND RELIABLE

Beginning on the following pages, projected enrollment is analyzed and a review of whether Pa Department of Education projections 5-10 years into the future are reasonable and reliable. Several methodologies are developed and analyzed as a means of comparison of the K-12 enrollment. These methodologies are identified below.

Projection Assumptions

Student projections, like any population projections, are based upon certain beliefs about how an area will grow or decline. A basic fact of projection methodology is that future trends in community development may be derived from past development, or in other words; the community will develop the way in the future that it has developed in the immediate past. The projection methods looked at within this report assumes that past trends are an indicator and indicate development trends of the future. Based upon a review of historical trends vs. recent trends, it appears that the school district enrollments may be in a decreasing mode, which ultimately means that averages and ratios of past performance may be the most accurate information from which to base projections.

Demographic and Enrollment methods reviewed include:

1. **Current Enrollment Plus 10% or 15%**
   The PA Department of Education reimbursement process is based upon school district enrollment and capacity calculations. The department will reimburse a school district based upon the higher of:
   1) PDE enrollment projections,
   2) School District enrollment projections, or
   3) Current enrollment plus 10%, (15% for districts with a total enrollment of under 1,500).
      This methodology allows School Districts the opportunity to manage fluctuating enrollments while providing for necessary facility upgrades.

2. **Census Based Enrollment Projections**
   This method of projection is based upon the assumption that an observable ratio between total population and school enrollments has existed in the past and will continue in future populations. There are definable historic trends, however if the school district is in a transitional trend period, these historical averages and percentages should be monitored annually, evaluated, and updated.

3. **PA. Department of Education Enrollment Projections**
   The enrollment projection model used by the Pennsylvania Department of Education (PDE) is patterned after projection models variously called educational progression or school retention. Projection models of this nature are based on the concept that students progress routinely from one grade to another and that any internal policies and external factors that influenced grade progression in the past will continue to influence the progression of students from grade to grade in the future.

4. **CRA Cohort Survival Projections**
   CRA reviewed the birth rate and cohort survival ratios for the most recent five (5) year period between 2006 and 2011. CRA calculated 3 and 5 year mean averages for the retention and birth rates. CRA then projected enrollment through the year 2019-20 school year utilizing the five (5) year mean average.

Analysis of Projected Enrollment
Bald Eagle Area School District
Methodology Analysis Summary

1	**Current District Enrollment**	Year **2016-17**	**1,641**
1A	Current Enrollment plus 10%		**1,805**

2 Census Based Trends - Potential Population

County population has continued to grow the last several decades,and is projected to continue to grow during the next decade yet at a slower rate.

Local (District) population has also continued to grow over the last several decades, and is projected to continue to grow in the next decade yet at a much slower rate.

District enrollment as a percentage of the total District population has declined significantly over the past several years. Maintaining this ratio, indicate the district enrollment may continue to decrease through 2021 as the relationship between local District population and the number of students continues to decrease.

Students projected by Census Based Trends:

		Year **2021**	**1,464**
2A	**Census Based Trends - Potential Population** Applying Annual Rates	Year **2021**	**1,510**
3	**PA Dept. of Education Enrollment Projections**	Year **2021**	**1,483**
4	**Cohort Survival Projections**	Year **2021**	**1,536**

PDE's projections differ only slightly from the census based trends method (27 students). Given the relatively consistent decline in live births in the municipalities within the district it may be reliable to apply a consistent rate to determine projected enrollment. This method results in a slightly higher total enrollment compared to the PDE projections and may provide a reasonable enrollment for planning purposes

Analysis of Projected Enrollment - Demographic Analysis

Bald Eagle Area School District

Student Population derived from Total Population

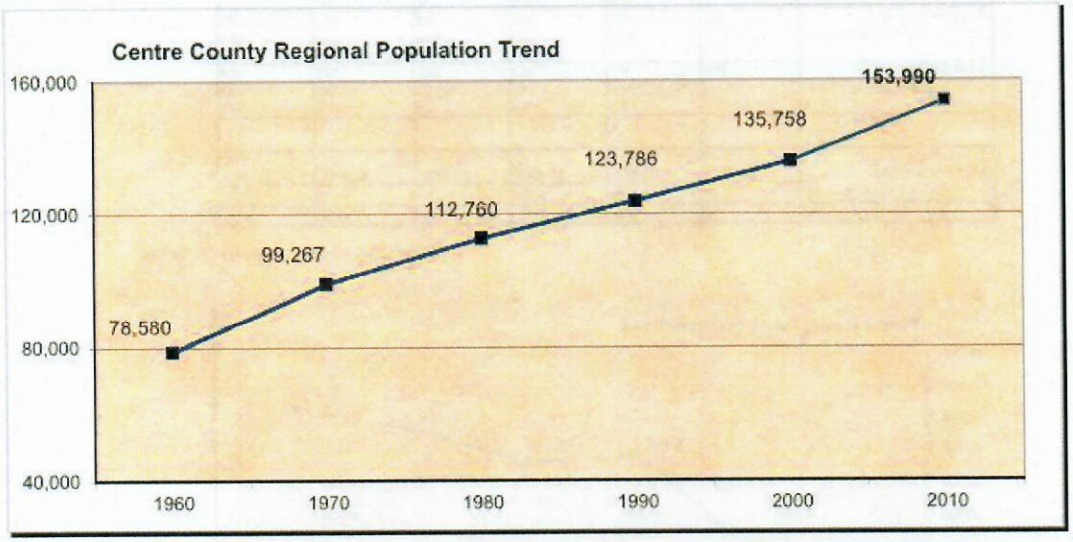
This method identifies the historic ratio of Total Students compared to Total District Population and then applies the ratio ***trend*** to project a Student Population

1 Q What is the Regional Population trend?

A Centre County has consistently increased in population at an average of 12.18% each decade since 1990. The *'rate of increase'* has fluctuated over the past four (4) decades.

Region	1960	1970	1980	1990	2000	2010 Census 2010
Centre County	78,580	99,267	112,760	123,786	135,758	153,990
rate of increase / decrease		26.3%	13.6%	9.8%	9.7%	13.4%
increase/decrease		**20,687**	**13,493**	**11,026**	**11,972**	**18,232**

Two (2) decade (1990/2010) average **11.55%**



Trends:

Each decade, Centre County population has consistently increased. The rate of increase has remained consistent
Estimated population trends indicate that the Regional population will continue to increase

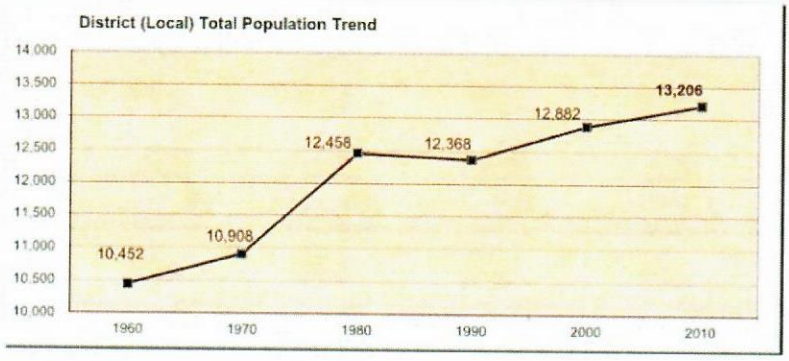
*Source: Pennsylvania Pennsylvania Decennial Census Poulation 1960-2010, Pennsylvania State Data Center

2 Q What is the Local Population trend?

A Overall, the Local Population (School District) has increased by approximately 3.8% each decade since 1990. The *'rate of increase'* has decreased the last several decades.

Local (School District)	1960	1970	1980	1990	2000	2010
Boggs Township	1,924	2,039	2,246	2,686	2,834	2,985
rate of increase/decrease		6.0%	10.2%	19.6%	5.5%	5.3%
		115	207	440	148	151
Burnside Township	463	430	472	390	410	439
rate of increase/decrease		-7.1%	9.8%	-17.4%	5.1%	7.1%
		-33	42	-82	20	29
Howard Borough	770	751	838	749	699	720
rate of increase/decrease		-2.5%	11.6%	-10.6%	-6.7%	3.0%
		19	87	-89	-50	21
Howard Township	797	732	912	1,004	924	964
rate of increase/decrease		-8.2%	24.6%	10.1%	-8.0%	4.3%
		-65	180	92	-80	40
Huston Township	661	837	1,222	1,282	1,311	1,360
rate of increase/decrease		26.6%	46.0%	4.9%	2.3%	3.7%
		176	385	60	29	49
Milesburg Borough	1,158	1,196	1,309	1,144	1,187	1,123
rate of increase/decrease		3.3%	9.4%	-12.6%	3.8%	-5.4%
		38	113	-165	43	-64
Port Matilda Borough	697	680	655	660	638	606
rate of increase/decrease		-2.4%	-3.7%	2.1%	-4.6%	-5.0%
		-17	-25	14	-31	-32
Snow Shoe Borough	714	874	852	800	771	765
rate of increase/decrease		22.4%	-2.5%	-6.1%	-3.6%	-0.8%
		160	-22	-52	-29	-6
Snow Shoe Township	1,877	1,710	1,877	1,756	1,760	1,746
rate of increase/decrease		-8.9%	9.8%	-6.4%	0.2%	-0.8%
		-167	167	-121	4	-14
Union Township	663	809	1,139	895	1,200	1,383
rate of increase/decrease		22.0%	40.8%	-21.4%	34.1%	15.3%
		146	330	-244	305	183
Unionville Borough	371	375	353	284	313	291
rate of increase/decrease		1.1%	-5.9%	-19.5%	10.2%	-7.0%
		4	-22	-69	29	-22
Worth Township	357	475	583	709	835	824
rate of increase/decrease		33.1%	22.7%	21.6%	17.8%	-1.3%
		118	108	126	126	-11
District Total Pop.	**10,452**	**10,908**	**12,458**	**12,368**	**12,882**	**13,206**
rate of increase/decrease		4.4%	14.2%	-0.7%	4.2%	2.5%
increase/decrease		456	1,550	(90)	514	324

Two (2) decade (1990/2010) average **3.34%**



Trends:
District population has increased over the last several decades

*Source Pennsylvania Pennsylvania Decennial Census Poulation 1960-2010, Pennsylvania State Data Center

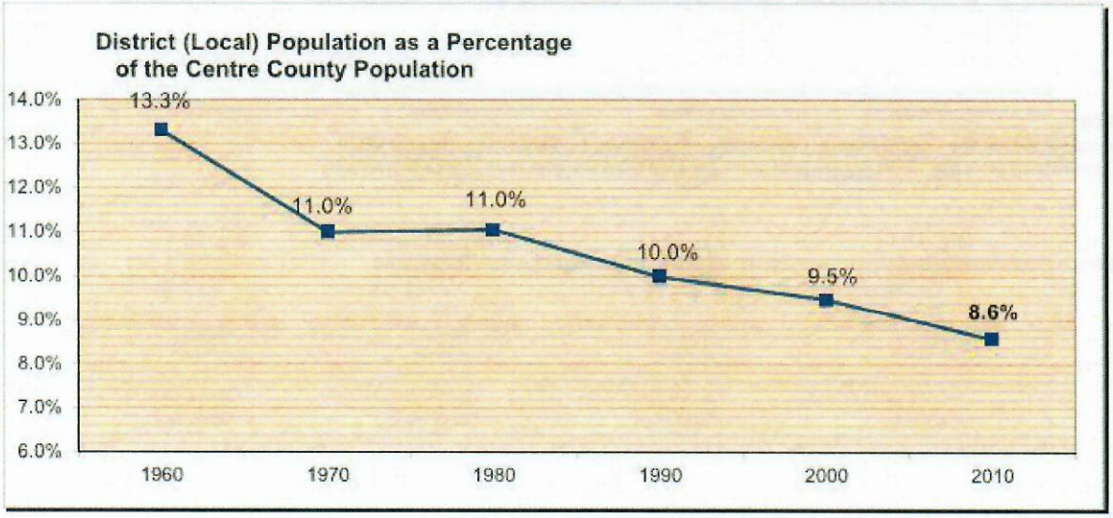
3 Q Is there any relationship between Regional and Local (District) Population?

A Since 1990 the District population has been averaging 8.4% of the Regional population but increasing slightly the past several decades.

District / County Population Ratio Trend
Percentage of the County Population that represents the School District Total Population

	1960	1970	1980	1990	2000	2010
Centre County	78,580	99,267	112,760	123,786	135,758	153,990
rate of increase/decrease		26.3%	13.6%	9.8%	9.7%	13.4%
Local (District) Total Pop.	10,452	10,908	12,458	12,368	12,882	13,206
rate of increase/decrease		4.4%	14.2%	-0.7%	4.2%	2.5%
% of County Pop.	**13.3%**	**11.0%**	**11.0%**	**10.0%**	**9.5%**	**8.6%**
rate of increase/decrease		-2.3%	0.1%	-1.1%	-0.5%	-0.9%

Two (2) decade (1990/2010) average **9.0%**



Trends:
The ratio between County & Local populations has consistently decreased.

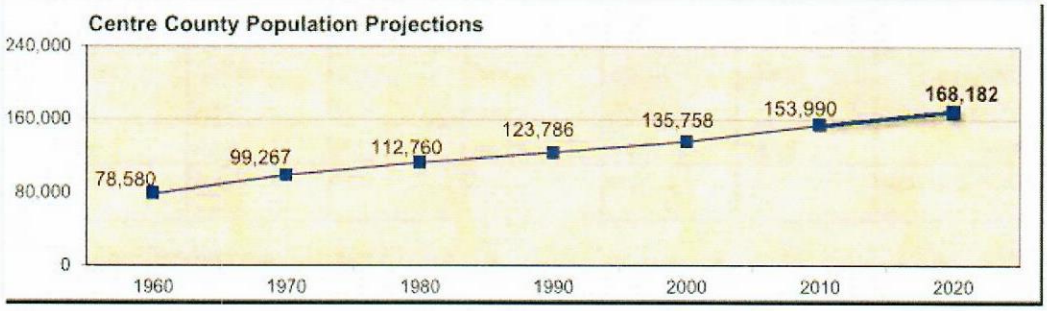
*Source: Pennsylvania Pennsylvania Decennial Census Poulation 1960-2010, Pennsylvania State Data Center

4 Q Are there any agencies that project County population?

A Yes, the **Centre County Planning Commission (YCPC)** projects the County population.

Region	1960	1970	1980	1990	2000	2010	Projection 2020
Centre County	78,580	99,267	112,760	123,786	135,758	153,990	**168,182**
rate of increase/decrease		26.3%	13.6%	9.8%	9.7%	13.4%	**9.2%**
		20,687	13,493	11,026	11,972	18,232	**14,192**

Two (2) decade (1990/2010) average **11.55%**



Trends:
CCPC projects that the Centre County population will continue to increase to the year 2020 and the '*rate of increase*' shall continue at a similar rate than the previous 2 decade average.

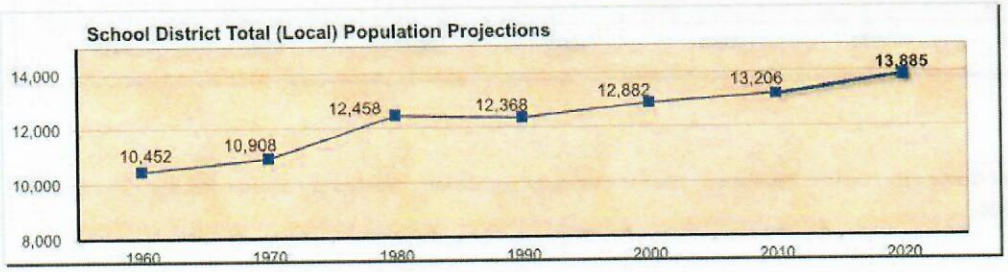
*Source: US Census Bureau, 2010. Pennsylvania State Data Center, population projections 2020 to 2040

5 Q Are there any agencies that project Municipal Population?

A Yes, the **Centre County Planning Commission (YCPC)** projects the Municipal population.

Municipality	1960	1970	1980	1990	2000	2010	Projection 2020
Boggs Township	1,924	2,039	2,246	2,686	2,834	2,985	3,099
rate of increase/decrease		6.0%	10.2%	19.6%	5.5%	5.3%	3.8%
		115	207	440	148	151	114
Burnside Township	463	430	472	390	410	439	519
rate of increase/decrease		-7.1%	9.8%	-17.4%	5.1%	7.1%	18.2%
		-33	42	-82	20	29	80
Howard Borough	770	751	838	749	699	720	707
rate of increase/decrease		-2.5%	11.6%	-10.6%	-6.7%	3.0%	-1.8%
		-19	87	-89	-50	21	-13
Howard Township	797	732	912	1,004	924	964	972
rate of increase/decrease		-8.2%	24.6%	10.1%	-8.0%	4.3%	0.8%
		-65	180	92	-80	40	8
Huston Township	661	837	1,222	1,282	1,311	1,360	1,523
rate of increase/decrease		26.6%	46.0%	4.9%	2.3%	3.7%	12.0%
		176	385	60	29	49	163
Milesburg Borough	1,158	1,196	1,309	1,144	1,187	1,123	1,200
rate of increase/decrease		3.3%	9.4%	-12.6%	3.8%	-5.4%	6.9%
		38	113	-165	43	-64	77
Port Matilda Borough	697	680	655	669	638	606	625
rate of increase/decrease		-2.4%	-3.7%	2.1%	-4.6%	-5.0%	3.1%
		-17	-25	14	-31	-32	19
Snow Shoe Borough	714	874	852	800	771	765	704
rate of increase/decrease		22.4%	-2.5%	-6.1%	-3.6%	-0.8%	-8.0%
		160	-22	-52	-29	-6	-61
Snow Shoe Township	1,877	1,710	1,877	1,756	1,760	1,746	1,878
rate of increase/decrease		-8.9%	9.8%	-6.4%	0.2%	-0.8%	7.6%
		-167	167	-121	4	-14	132
Union Township	663	809	1,139	895	1,200	1,383	1,589
rate of increase/decrease		22.0%	40.8%	-21.4%	34.1%	15.3%	14.9%
		146	330	-244	305	183	206
Unionville Borough	371	375	353	284	313	291	305
rate of increase/decrease		1.1%	-5.9%	-19.5%	10.2%	-7.0%	4.8%
		4	-22	-69	29	-22	14
Worth Township	357	475	583	709	835	824	764
rate of increase/decrease		33.1%	22.7%	21.6%	17.8%	-1.3%	-7.3%
		118	108	126	126	-11	-60
District Total Pop.	**10,452**	**10,908**	**12,458**	**12,368**	**12,882**	**13,206**	**13,885**
rate of increase/decrease		4.4%	14.2%	-0.7%	4.2%	2.5%	5.1%
increase/decrease		456	1,550	(90)	514	324	679

Two (2) decade (1990/2010) average **3.34%**



Trends:

CCPC projects that the District population will continue to grow at a faster rate by the year 2020 with a projected 5.1% increase in population over the next several years

*Source: Centre County Travel Demand Growth Forecast - 2009

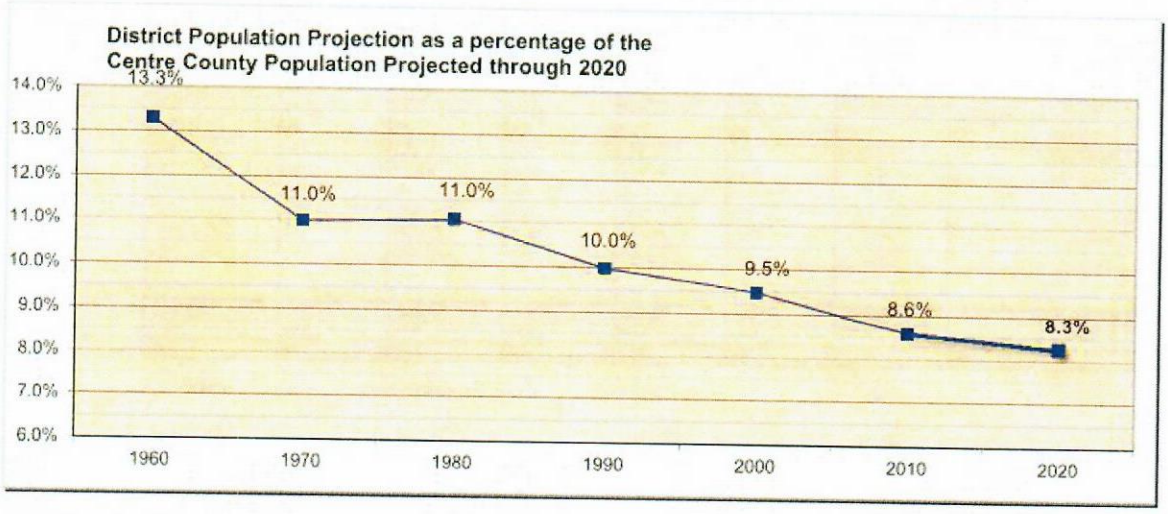
6 Q How does the County / District Population Ratio compare with the 2020 projections?

A Since 1990 the District population has been averaging 8.4% of the County Population. The County population will continue to grow at a faster rate when compared to Bald Eagle School District and the percentage is projected to decrease to 7.7% by 2020

District / County Population Ratio Projections
Percentage of the County Population that represents the School District Total Population

	1960	1970	1980	1990	2000	2010	Projected 2020
Centre County	78,580	99,267	112,760	123,786	135,758	153,990	**168,182**
District Total Pop.	10,452	10,908	12,458	12,368	12,882	13,206	**13,885**
% of County Pop.	13.3%	11.0%	11.0%	10.0%	9.5%	8.6%	**8.3%**
rate of increase / decrease		-2.3%	0.1%	-1.1%	-0.5%	-0.9%	-0.3%

Two (2) decade (1990/2010) average **9.0%**



Trends:

Trends indicate that the County / District Population ratio has decreased significantly over the last several decades. This trend is expected to continue.

*Source: US Census Bureau, 2010. Pennsylvania State Data Center, population projections 2020 to 2040

7 Q What is the District's K-12 Student Population Trend?

A (525) students or 23.6% student decrease between the years 2000 to 2015.

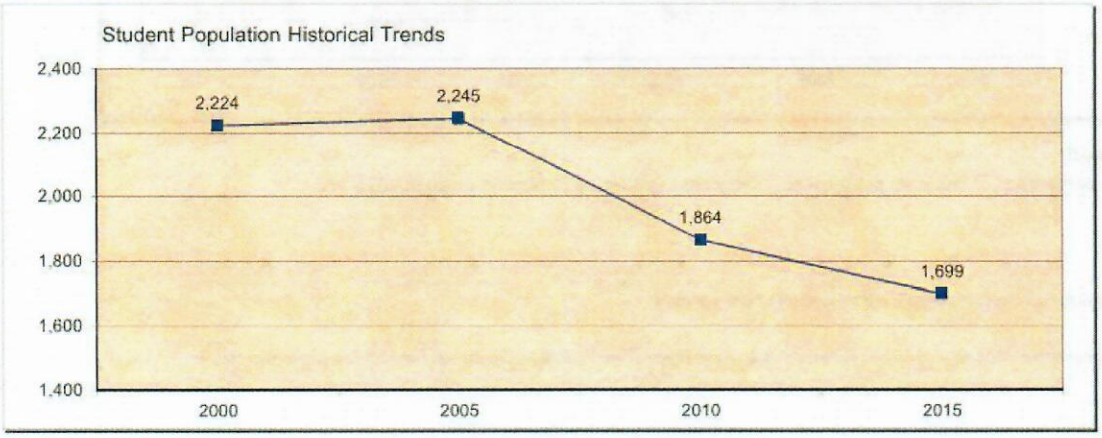
Bald Eagle Area School District	2000	2005	2010	2015	2016	
District's Total K-12 Students	**2,224**	**2,245**	**1,864**	**1,699**	**1,641**	
public enrollment only		21	(381)	(165)	(58)	
increase/decrease from previous period:		0.9%	-17.0%	-8.9%	-3.41%	
per year:		0.19%	-3.39%	-1.77%	-0.68%	

Between **2000 and 2015,** student population **Decreased** approximately - -23.6% annual average -1.6%

Annual K-12 student population between 2000 and 2015 fluctuated with a 1.6% overall average annual decrease in enrollment .

Detailed Historical Enrollment Chart

Academic Year Starting	2000	2005	2010	2015	2016
Kindergarten	154	140	125	130	103
1	140	149	137	107	120
2	151	125	122	128	107
3	174	118	138	116	123
4	166	155	143	132	118
5	162	151	148	117	133
K-5 Total	947	838	813	730	704
6	185	148	156	127	113
7	164	151	137	128	127
8	192	173	121	132	132
Middle School Total	541	472	414	387	372
9	189	164	168	144	131
10	182	165	150	147	142
11	195	194	160	146	146
12	170	412	159	145	146
High School Total	736	935	637	582	565
District Total	2,224	2,245	1,864	1,699	1,641



Trends:

Trends indicate that the student population has decreased the last fifteen (15) years. the 'rate of decrease' has increased.

*Source: http://www.education.pa.gov/Data-and-Statistics/Pages/Enrollment%20Reports%20and%20Projections.aspx#tab-1

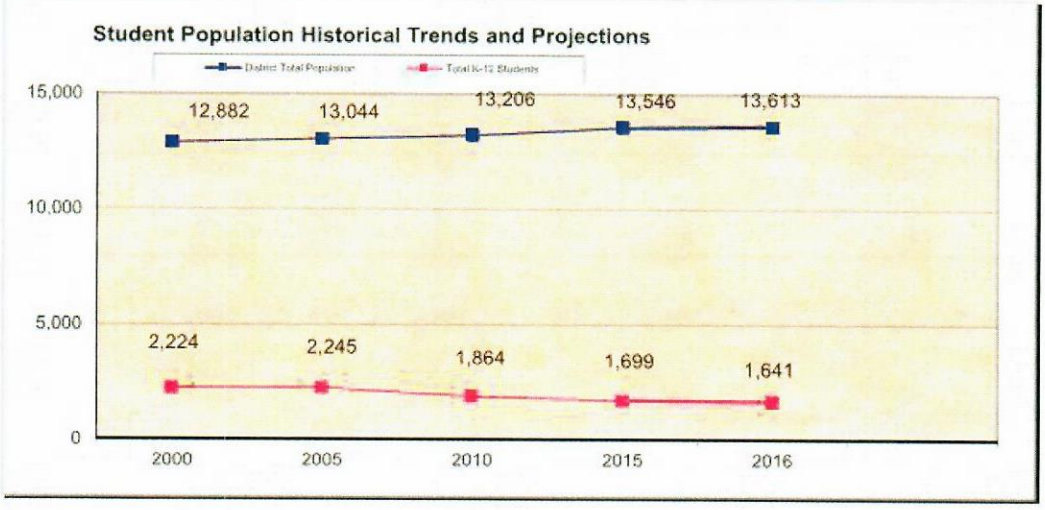
8 Q Is there any relationship between Local (District) and District K-12 population?

A Yes, the percentage of students per local population has declined the past fifteen (15) year period at an average of 16.5% and is continuing to decline at a slightly lesser rate.

HISTORICAL TREND - PROJECTION METHOD

	2000	2005	2010	2015	2016	
District Total Local Population	12,882	13,044	13,206	13,546	13,613	
District Total K-12 Students	2,224	2,245	1,864	1,699	1,641	
% Students *per* Local Population	17.3%	17.2%	14.1%	12.5%	12.1%	

* district local population numbers = interpolated 2000 - 2015 (15) year average **15.3%**



Trends:
The percentage of students per local population has continued to decline through 2016-17..

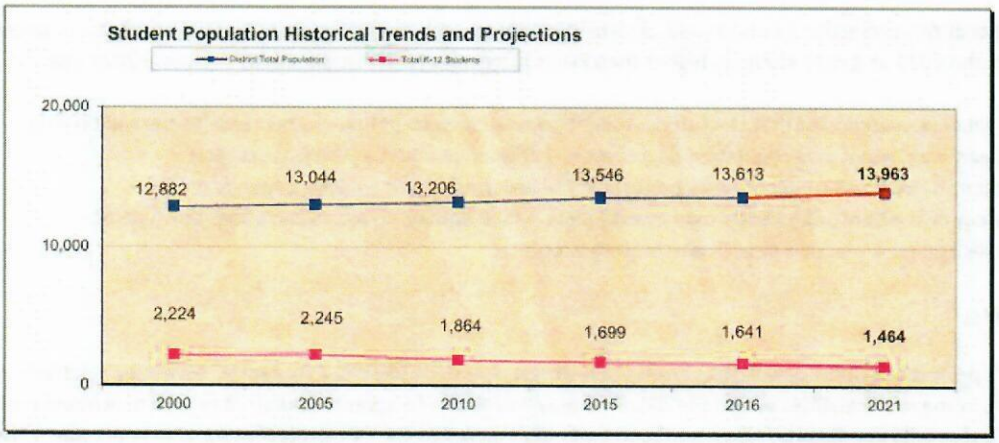
* District Local Population projected by method of interpolation

*Source: http://www.education.pa.gov/Data-and-Statistics/Pages/Enrollment%20Reports%20and%20Projections.aspx#tab-1

9 Q How does the Local (District) and District K-12 population compare with the PDE 2020 projections?

A In five (5) years from 2010 to 2015, the district population trend decreased from 15.2% to 13.5% of students per local population. Continuing this 1.72% declining ratio to project future enrollment, this chart projects enrollment that is slightly less than PDE projections for 2021.

HISTORICAL TREND - PROJECTION METHOD						Projections
	2000	2005	2010	2015	2016	2021
District Total Population	12,882	13,044	13,206	13,546	13,613	13,963
increase from previous decade		1.3%	1.2%	2.6%	0.5%	3.1%
District Total K-12 Students	2,224	2,245	1,864	1,699	1,641	1,464
rate of increase/decrease from prev. interval		0.9%	-17.0%	-8.9%	-3.4%	-10.8%
student increase / decrease per year		0.19%	-3.39%	-1.77%	-0.68%	-2.16%
% Students *per* Population	17.3%	17.2%	14.1%	12.5%	12.1%	10.5%
			Historical average:	15.3%		
		5 year change:	0.1%	-3.1%	-1.57%	-0.49%	-1.57%
		15 year average percentage change 2000-2015		1.6%		
				PDE Projections:	1637	1483
				Difference:	4	-19
* district population numbers = interpolated/projected				percentage	0.24%	-1.32%



Trends:

As noted in Category #7, recognizing that in the last 15 years, the K-12 student population trend decreased approximately 23.6%, the chart interpolates a 1.72% annual decrease of of students per district population. if this trend continues K-12 projections may result in a 2021 projection of 1,463 students.

Projected K-12 enrollment per student population trends for the 2021 year -	**1,464**	
PDE K-12 enrollment projections for the 2021 year -	**1,483**	19

Given the historic declining enrollment trends in K-12 enrollment, this chart above may then tend to indicate that the Pa Dept of Education enrollment projections may be deemed reasonable. However, there may be a slightly more decline in enrollment than is indicated by PDE's projections.

Sources: http://www.education.pa.gov/Data-and-Statistics/Pages/Enrollment%20Reports%20and%20Projections.aspx#tab-1
Centre County Travel Demand Growth Forecast - 2009

9A Q Is the PDE Enrollment Projection close to being reasonable and reliable?

A Between the years 2000-2015, the student enrollment decreased at a rate of 1.6% per year

If this 15 year rate increase of 1.6% annually is applied, the projections would be as follows:

2016	1,641		actual student enrollment year 2015
		% of Population	
2021 =	1,510	11.09%	(131) projected decrease in students from the 2016 enrollment
			-8.00% percentage decrease since 2016 (5 years)
			-1.60% average decrease **per year** since 2016
2026 =	1,378	9.87%	(263) projected decrease in students from the 2016 enrollment
			-16.0% projected decrease since 2016
			-1.60% projected average decrease **per year** since 2016

Note that this projection method yields a significant decrease in student population (131 students) between 2016 and 2021 and is 27 students higher than PDE's projection (1483 students) for the same 2021 year.

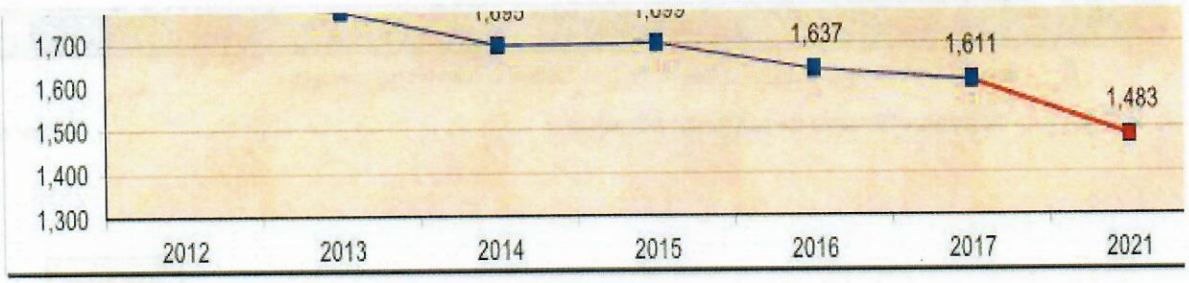
The data above indicates that the future student population will continue to decrease as the relationship between enrollment and population decreases at 1.6% per year and as the District total population continues to decrease as projected. The accuracy of this analysis depends on the accuracy of the Census and State agency estimates. Many unknown factors can affect this type of analysis and no projection or estimate is 100% accurate.

Trends:

PDE's projections differ only slightly from the historical trends method (27 students). Given the relatively consistent decline in live births in the municipalities within the district it may be reliable to apply a consistent rate to determine projected enrollment. This method results in a slightly higher total enrollment compared to the PDE projections and may provide a reasonable enrollment for planning purposes

10 Q Are there any agencies that project District enrollment?

A Yes, Pa Department of Education (PDE) projects District enrollment. PDE projections indicate K-12 student population DECREASING significantly through 2025. This decrease appears realistic given the historic trends in local population and enrollment the last several school years.



*Source: PDE enrollment projections dated 12-30-2016

11 Q Are there other Student Enrollment Trends ?

A Kindergarten Students as a percentage of the Total Student Enrollment has averaged : **7.0%**

The ratio has fluctuated the past five (5) year period. over the pas

11 Q Are there other Student Enrollment Trends?

A Yes, Kindergarten Students as a percentage of the Total Student Enrollment has averaged 7% over the past 5 years.

The ratio has fluctuated the past five (5) year period.

11 Q Are there other Student Enrollment Trends ?

A Kindergarten Students as a percentage of the Total Student Enrollment has averaged : **7.0%**

The ratio has fluctuated the past five (5) year period. over the past

% BASED - PROJECTION METHOD

	2013	2014	2015	2016	2017	% Students Projections 2021
Total K-12 Enrollment	1,774	1,695	1,699	1,637	1,611	1,464
Kindergarten	131	106	130	97	129	103
% Students	7.4%	6.3%	7.7%	5.9%	8.0%	7.0%

The chart uses the average 7.3% to project the Kindergarten Enrollment in the year 2025 to reflect the slight increase in the percentage of K Students.

PDE 2021 Kindergarten Projection = 110
Difference 7

Kindergarten Enrollment History and Projection

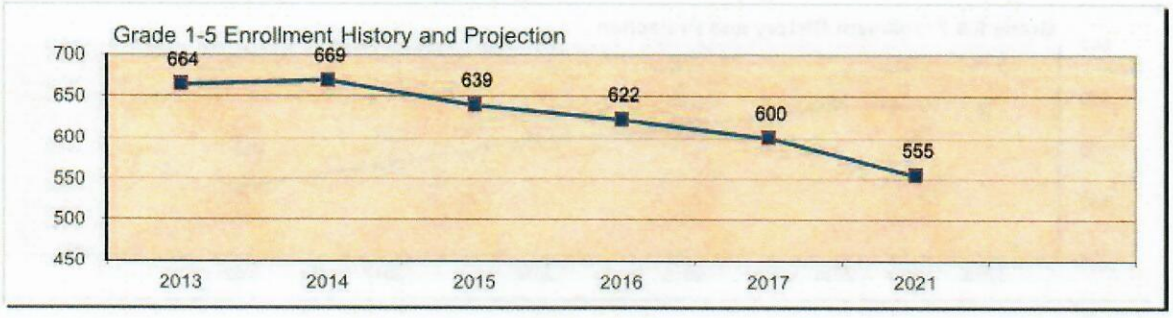
11A Q Are there other Student Enrollment Trends?

A Yes, Grade 1-5 Students as a percentage of the Total Student Enrollment has averaged 37.9% over the past 5 years.

The ratio has fluctuated the past five (5) year period.

% BASED - PROJECTION METHOD	2013	2014	2015	2016	2017	% Students Projections 2021
Total K-12 Enrollment	1,774	1,695	1,699	1,637	1,611	1,464
1-5 Enrollment	664	669	639	622	600	555
difference		5	(30)	(17)	(22)	(45)
increase / decrease		0.8%	-4.5%	-2.7%	-3.5%	-7.4%
% Students	37.4%	39.5%	37.6%	38.0%	37.2%	37.9%

PDE 2021 Grade 1-5 Projection =	547
Difference	-8



*Source: PDE enrollment projections dated 12-30-2016

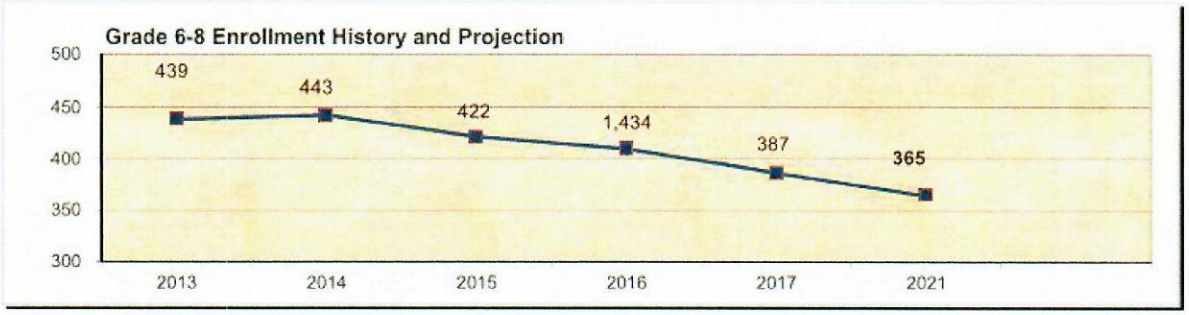
11B Q Are there other Student Enrollment Trends?

A Yes, Grade 6-8 Students as a percentage of the Total Student Enrollment has averaged 25.0% over the past 5 years.

The ratio has fluctuated the past five (5) year period.

% BASED - PROJECTION METHOD	2013	2014	2015	2016	2017	% Students Projections 2021
Total K-12 Enrollment	1,774	1,695	1,699	1,637	1,611	1,464
6-8 Enrollment	439	443	422	410	387	365
difference		4	(21)	(12)	(23)	(22)
increase / decrease		0.9%	-4.7%	-2.8%	-5.6%	-5.6%
% Students	24.7%	26.1%	24.8%	25.0%	24.0%	25.0%

PDE 2020 Grade 6-8 Projection =	338
Difference	-27



*Source: PDE enrollment projections dated 12-30-2016

11C Q Are there other Student Enrollment Trends?

A Yes, Grade 9-12 Students as a percentage of the Total Student Enrollment has averaged 34.6% over the past 5 years.

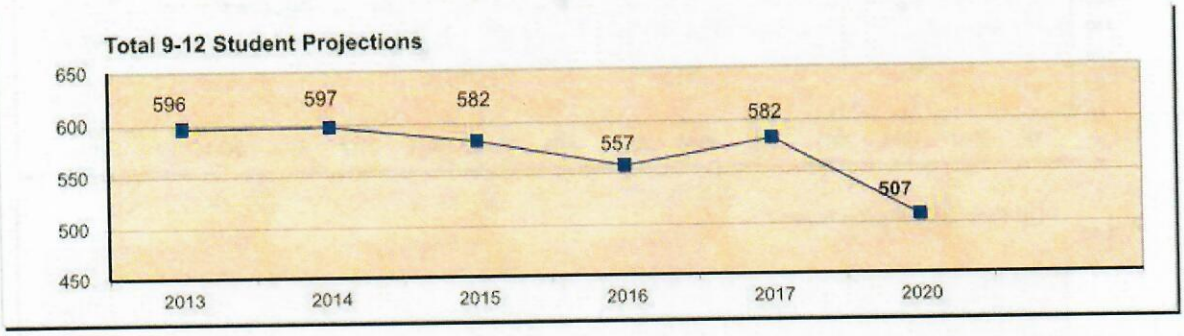
The ratio has fluctuated the past five (5) year period.

% BASED - PROJECTION METHOD

	2013	2014	2015	2016	2017	% Students Projections 2020
Total K-12 Enrollment	1,774	1,695	1,699	1,637	1,611	1,464
9-12 Enrollment	596	597	582	557	582	507
difference		1	(15)	(25)	25	(75)
increase / decrease		0.2%	-2.5%	-4.3%	4.5%	-12.9%
% Students	33.6%	35.2%	34.3%	34.0%	36.1%	34.6%

PDE 2020 Grade 9-12 Projection = 502

Difference -5



Trends:

2020 total K-12 enrollment based on average student percentage to total projected enrollment =

*Source: PDE enrollment projections dated 12-30-2016

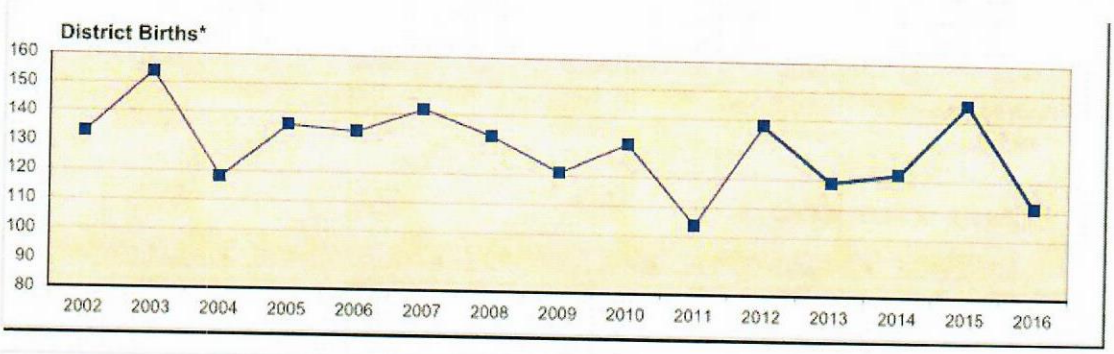
12 Q Does the District's birth and retention rates support the projections in student population as a percentage of total District population?

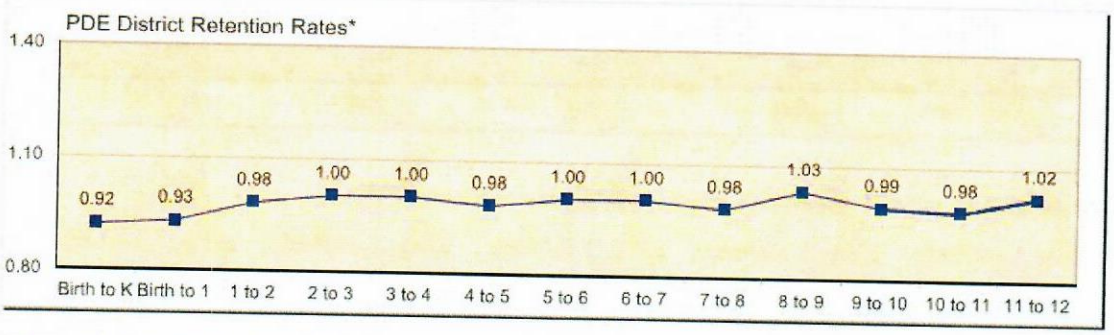
A Annual district births fluctuate significantly from year to year. This is typical for a school district of this size. However, the overall tendency had been a decline in births over the last 15 years from a high of 154 to a low of 104.

Actual Births

Year	Births	Change from Previous Year
2007	142	
2008	133	-6.34%
2009	121	-9.02%
2010	131	8.26%
2011	104	-20.61%
2012	138	32.69%
2013	119	-13.77%
2014	122	2.52%
2015	146	19.67%
2016	111	-23.97%

Source: Commonwealth of Pennsylvania - Department of health ; health statistics, resident live births by age of mother, county, and MCD





Retention rates **more than 1.00** indicate that the group is **increasing** compared to the previous year
Retention rates **less than 1.00** indicate that the group is **decreasing** compared to the previous year
PDE's retention rates are based on the previous 4 year retention rate data.

*Sources: PDE enrollment projections dated 12-30-2016, average rate

13 Q What does the Cohort Survival rate tell us about future K-12 enrollment?

A The Cohort Survival Ratio method is an enrollment projection method which essentially compares the number of students in a particular grade to the number of students in the previous grade during the previous year. Ratios are computed for each grade, averaged from a set number of historical years and are then used to project future enrollments. The ratios indicate whether a change in the number of students is indicative of enrollment that is stable, increasing or decreasing. The cohort survival method utilizes birth data and historical cohort survival ratios to project future enrollments.

K-12 Enrollment History 2010-2015

Year	2011	2012	2013	2014	2015	2016
K	135	117	131	106	130	103
1	126	139	115	130	107	120
2	133	124	134	113	128	107
3	132	133	122	133	116	123
4	136	137	132	120	132	118
5	137	136	136	126	117	133
6	143	140	135	134	127	113
7	162	147	139	138	128	127
8	134	156	148	138	132	132
9	119	144	157	148	144	131
10	167	125	142	149	147	142
11	147	170	121	138	146	146
12	163	158	162	122	145	146
Total	1,834	1,826	1,774	1,695	1,699	1,641

Example Calculation

	132
divided by	133
	99.25%

Sources: 2011-2015 POE enrollment projections dated 12-3-2016
2016 provided by BEASD (OCT 2016)

Cohort Survival Ratios (%)

Year	2012	2013	2014	2015	2016	Mean last 5 years	Mean Last 3 years
B-K	82.39%	98.50%	87.60%	99.24%	99.04%	93.35%	95.29%
K to 1	102.96%	98.29%	99.24%	100.94%	108.33%	101.95%	102.84%
1 to 2	98.41%	96.40%	98.26%	98.46%	100.00%	98.31%	98.91%
2 to 3	100.00%	98.39%	99.25%	102.65%	104.07%	100.87%	101.99%
3 to 4	103.79%	99.25%	98.36%	99.25%	98.31%	99.79%	98.64%
4 to 5	100.00%	99.27%	95.45%	97.50%	99.25%	98.29%	97.40%
5 to 6	102.19%	99.26%	98.53%	100.79%	103.54%	100.86%	100.95%
6 to 7	102.80%	99.29%	102.22%	95.52%	100.00%	99.97%	99.25%
7 to 8	96.30%	100.68%	99.28%	95.65%	96.97%	97.78%	97.30%
8 to 9	107.46%	100.64%	100.00%	104.35%	100.76%	102.64%	101.70%
9 to 10	105.04%	98.61%	94.90%	99.32%	101.41%	99.86%	98.55%
10 to 11	101.80%	96.80%	97.18%	97.99%	100.68%	98.89%	98.62%
11 to 12	107.48%	95.29%	100.83%	105.07%	100.00%	101.74%	101.97%

Cohort Survival Ratio Choices for Forecast Percentage (%) (Based on 5 Year Mean)

Year	Choice for Forecast Year 1 (2017)	Choice for Forecast Year 2 (2018)	Choice for Forecast Year 3 (2019)	Choice for Forecast Year 4 (2020)	Choice for Forecast Year 5 (2021)	Choice for Forecast Year 6 (2022)
B-K	93.35%	93.35%	93.35%	93.35%	93.35%	93.35%
K to 1	101.95%	101.95%	101.95%	101.95%	101.95%	101.95%
1 to 2	98.31%	98.31%	98.31%	98.31%	98.31%	98.31%
2 to 3	100.87%	100.87%	100.87%	100.87%	100.87%	100.87%
3 to 4	99.79%	99.79%	99.79%	99.79%	99.79%	99.79%
4 to 5	98.29%	98.29%	98.29%	98.29%	98.29%	98.29%
5 to 6	100.86%	100.86%	100.86%	100.86%	100.86%	100.86%
6 to 7	99.97%	99.97%	99.97%	99.97%	99.97%	99.97%
7 to 8	97.78%	97.78%	97.78%	97.78%	97.78%	97.78%
8 to 9	102.64%	102.64%	102.64%	102.64%	102.64%	102.64%
9 to 10	99.86%	99.86%	99.86%	99.86%	99.86%	99.86%
10 to 11	98.89%	98.89%	98.89%	98.89%	98.89%	98.89%
11 to 12	101.74%	101.74%	101.74%	101.74%	101.74%	101.74%

13A Q What does the cohort survival rate tell us about future K-12 enrollment?

A The Cohort Survival depicts a steady decline in student enrollment over the 5-year mean

K-12 Enrollment Forecast 5 Yr Mean

Year	2017	2018	2019	2020	2021	2022
K	129	111	114	136	104	
1	105	131	113	116	139	
2	118	103	129	111	114	
3	108	119	104	130	112	
4	123	108	119	104	130	
5	116	121	106	117	102	
6	134	117	122	107	118	
7	113	134	117	122	107	
8	124	110	131	114	119	
9	135	127	113	135	117	
10	131	135	127	113	134	
11	140	129	134	126	112	
12	149	143	132	136	128	
Total	**1,625**	**1,590**	**1,561**	**1,567**	**1,536**	

Preliminary 2017 birth figures unavailable

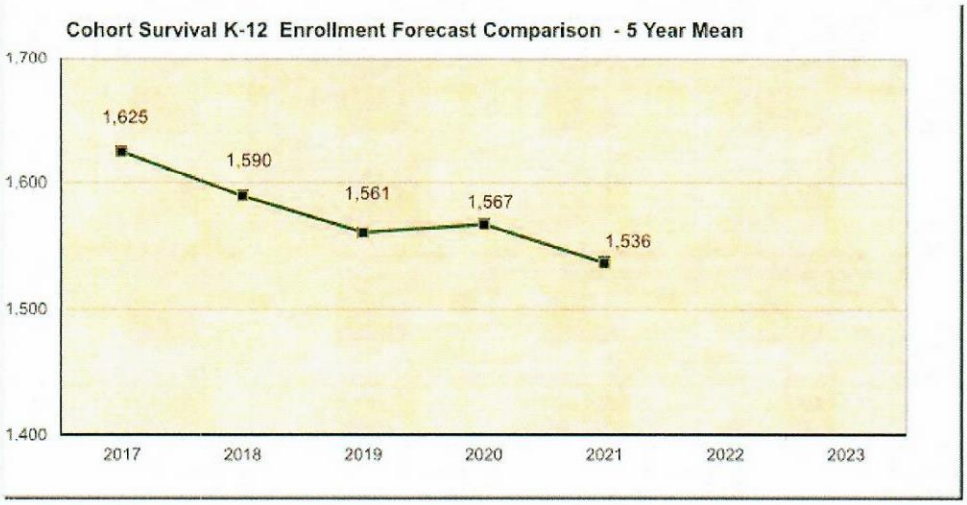
	% change	5%

Example Calculation

	134
x	97.78%
	131

Note: Any cohort survival forcast 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.

Trend:
The cohort survival forcast indicates that the K - 12 enrollment will decrease significantly through 2020.



*Source: Commonwealth of Pennsylvania - Department of health ; health statistics, resident live births by age of mother, county, and MCD

14 Trends - Census Analysis Summary

Based on historic trends and County Population projections, District Student population may see a consistent increase from the most recent 2015 enrollment. Other methodologies appear to dictate a fluctuation in total enrollment.

2016 Enrollment	1,641			
2021 Projection	1,464	1,510	1,483	1,536
	METHOD #1	METHOD #2	METHOD #3	METHOD #4
	Student % of projected population	Annual Rates	PDE	Cohort Survival

METHOD #1
Student %
Local Population
Category #9

Projected students at an average of 14.9% of the projected District Total Population-
The projections are derived from recognizing the student enrollment trend of the Total District Population during the past fifteen (15) years and applying this percentage. This method recognizes that student enrollment may continue to decrease over the next 5 - 10 years.

METHOD #2
Annual Rates
Category #9A

Between 2000-2015, the student enrollment decreased at a rate of 1.6% per year
If this 15 year rate decrease of 1.6% annually is applied, the projections would be as follows:

2016	1,641	actual student enrollment year 2015
2021	1,510	(131) projected decrease in students from the 2016 enrollment -8.00% percentage decrease since 2016 (5 years) **-1.6%** average decrease per year since 2016
2026	1,378	(263) projected decrease in students from the 2016 enrollment -16.0% projected decrease since 2016 **-1.6%** projected average decrease per year since 2016

METHOD #3
PDE
Category #10

PDE -
PDE projections based on resident live births and retention rates by grade per year. PDE projects a significant decrease in K-12 population over the next 5-10 years

METHOD #4
Cohort Survival
Category #12

Cohort Survival -
The cohort survival method utilizes birth data and historical cohort survival ratios to project future enrollments. The cohort survival forcast indicates that the K-12 enrollment may decrease approx 22% from the current enrollment through school year 2021.

County population has seen continued growth the last several decades. County population projections indicate continued growth in the next decade yet at a slower rate.

Local (District) population has seen continued growth the last several decades. Local (District) population projections indicate continued growth in the next decade yet at a much slower rate.

District total students as a percentage of the total District population has steadily declined over the past several years. Maintaining this ratio, trends indicate the district enrollment may continue to decrease through 2020 as the relationship between local District population declines and the steady decline in District K-12 enrollment continues.

SECTION 4 - PDE Requirement

PROBABLE ENROLLMENT FOR EACH GRADE STRUCTURE AND BUILDING

The information listed on the following charts identifies different methods of planning for future enrollment for each grade structure and building.

Grade Structure K-5, 6-8, 9-12:

Historic trends indicate a decrease in enrollment over the past several years and census based future K-12 projections tend to indicate continuing long term decline in enrollment. PDE enrollment projections also indicate continued declining enrollment through 2021.

	Current Enrollment	Current percentage	Current percentage	Probable Enrollment	Projected Change
	Oct-16	(total)	Grade grouping)	2021	
Mountaintop ES	132	8%	19%	122	-10
Port Matilda ES	125	8%	18%	115	-10
Howard ES	91	6%	13%	84	-7
Wingate ES	352	22%	50%	325	-27
Grades K - 5	700	43%	100%	646	-54
Middle School 6-8	368	22%	22%	340	-28
High School 9-12	568	35%	35%	524	-44
Total Students	1,636	100%	157%	1,510	-126

Grades	Current Enrollment May-16	Probable Enrollment 2021	Current Total Bldg Capacity	Capacity Surplus / Deficit	Ed Program Additions Recommended?
		PDE			
Mountaintop ES	132	122	200	78	No
Port Matilda ES	125	115	175	60	No
Howard ES	91	84	150	66	No
Wingate ES	352	325	475	150	No
Grades K - 5	700	646	1,000	354	
Middle School 6-8	368	340			
High School 9-12	568	524			
Grades 6-12	936	864	1,549	685	No
Total Students	1,636	1,510	2,549	1039	

Probable Enrollment Each Grade Structure and Building

K-5, 6-8, 9-12

	A	B	C	D	E
	Current Enrollment 2015/16	PDE 2021 Projected Enrollment	PDE Highest Projected Enrollment	Enrollment 2021 Projected District Pop %	Current Enrollment PLUS 10%
Grades K - 5	**700**	**657**	**688** 2017	**658**	**770**
Grades 6-8	**368**	**339**	**370** 2017	**365**	**405**
Grades 9 - 12	**568**	**487**	**553** 2017	**507**	**625**
District Total	**1,636**	**1,483**	**1,611**	**1,530**	**1,800**

*Estimated values based in information provided by U.S Census Bureau, Center for Rural Pa and DASD

Analysis:

Given PDE's enrollment projections have been determined to be unreliable and unreasonable, the District should consider the following for Probable Enrollment as the safest method of planning enrollment and allowing for additional capacity:

for Kindergarten through Grades 12 -
Current Enrollment Plus 10%, in order to accommodate the current PDE projection inconsistencies and provide some space flexibility.

Grades	Current Enrollment Oct-16	Current Percentage	Probable Enrollment 2021 PDE	Projected Decrease
Mountaintop ES	132	19%	124	**8**
Port Matilda ES	125	18%	117	**8**
Howard ES	91	13%	85	**6**
Wingate ES	352	50%	330	**22**
Grades K - 5	700	100%	657	**43**
Middle School 6-8	368	100	339	**29**
High School 9-12	568	100	487	**81**
Total Students	1,636		1,483	**153**

SECTION 5 - PDE Requirement

BUILDING CAPACITY AS IT RELATES TO THE EDUCATIONAL PROGRAM

This section describes each building's capacity, or how many students the building can house, both in its existing condition as well as its requested or planned use. The capacity of each building strongly relies on the District's educational program needs. Buildings that were constructed several years ago may not always meet the standards of today's educational concepts and goals, including class size, technological advancements, special needs, community use, flexibility and curriculum changes, just to name a few.

The Pennsylvania Department of Education (PDE) has established a process of determining the capacity of elementary and secondary buildings. These standards designate a predetermined amount of student capacity for various types of spaces. Ultimately, these PDE capacities are mainly intended for reimbursement purposed through the Plancon process. Depending on how the District wishes to utilize a building, there may be some differences of opinions regarding how much capacity the building actually contains.

The educational programs offered in schools today require flexible and varied spaces. Depending on the program usage, spaces may have different capacities even though they may be similar in size.

The capacity for each space is determined by:

- Maximum class size guidelines or policies from the School Board or recommendations of the Pennsylvania Department of Education.
- Specialized programs such as kindergarten and special education.
- Spaces which are used for all students for specialized instruction, such as art or music on the elementary level; or specialized services such as reading support or other small group interventions; are not counted as part of the instructional capacity of a building.
- Spaces which fall below the PDE recommended classroom size of 660 square feet are not counted as part of the instructional capacity of the facility.
- Current space utilization
- PDE applies a 90% utilization factor to the rated Full Time Equivalent (FTE) for secondary schools and allows for no utilization factor at the elementary level. This calculation is, in large part, related to financial reimbursement calculations rather than educational programming.

Historically school districts throughout North America have determined the capacity of school by counting the number of classrooms in a building and multiplying by an average class size. In facility planning terminology we have used the term, "design capacity", to describe this methodology. Even though at first glance this seems only to be common sense, this methodology does not take into account the programmatic implications of school facilities. In an elementary school there is a need for libraries/media centers, administrative areas, special education classrooms, and specialized spaces for specific program areas such as science, art and music. In a secondary school, in theory it may be

possible to use every classroom every period of every day, but from a practical perspective it is not likely. In facility planning terminology, taking program issues into consideration, we use the term, "functional capacity".

Public schools use space in school buildings for special purposes such as community activities or district-wide special education programs when space is available in a building. The location of this type of program impacts the number of students the building can accommodate. For planning purposes, functional capacity assumes these special programs could be moved to another location. Therefore functional capacity is defined as the number of students the building can accommodate assuming a "traditional" educational program. The formula used for determining capacity should reflect the programs of the public schools yet should be kept simple for planning purposes. The method for determining functional capacity is different for elementary, middle and high schools.

For educational planning purposes relative to determining realistic, or "functional" capacity in schools, the following are the recommended "Functional Capacity" calculations:

- ✓ **The recommended "Functional Capacity" at the Elementary level is 90%-95%**
- ✓ **The recommended "Functional Capacity" at the Secondary level is 85%-90%**

Capacity of Existing Buildings based on Current and Planned Use of Space

The Pennsylvania Department of Education has established standards to calculate the capacity of a school facility. In these standards a unit student capacity is assigned to various areas of the facility. However, special and support spaces, distribution of students by grade levels, course selections on the middle and high school levels and attendance areas create situations in which it is not possible for a school district to place as many students in each unit of the facility as identified in the PDE standards.

For the Bald Eagle Area School District, the current building capacities are analyzed as noted on the following pages with Utilization percentages identified for each building based on several of the enrollment projection methodologies that were identified and discussed in the previous Section 3 – Census Analysis.

Enrollment Projection by Grade Group related to Building Capacity

Capacity and utilization analysis

K-5 Elementary Schools — **K-5**

School	Current Bldg Capacity*	Current 10/2016 Enrollment	Current Utilization Current Enrollment	Projected 2021 Projection	Projected Utilization PDE 2020 Enrollment	Projected Current Enrollment Plus 10%	Projected Utilization Current Enroll + 10%	Utilization Benchmark	Additional Space Required ?
Mountaintop Area ES	200	132	66%	122	61%	145	73%	90% - 95%	No
Port Matilda ES	175	125	71%	115	66%	138	79%		No
Howard ES	150	91	61%	84	56%	100	67%		No
Wingate ES	475	352	74%	325	68%	387	82%		No
	1,000	**700**	**70%**	**646**	**65%**	**770**	**77%**		
Capacity Available***		*300*		*354*		*230*			

6-12 Middle School/ High School — **6-12**

School	Current Bldg Capacity	Current 5/2016 Enrollment	Current % Full Current Enrollment	Projected 2021 Projection	Projected % Full PDE 2020 Enrollment	Projected Current Enrollment Plus 10%	Projected % Full Current Enroll + 10%	Utilization Benchmark	Additional Space Required ?
Bald Eagle MS/HS	1,549	936	60%	864	56%	1030	66%	80-85%	No
	1,549	**936**	**60%**	**864**	**56%**	**1,030**	**66%**	**0%**	
Capacity Available***		*613*		*685*		*519*			

Analysis: Space utilization analysis indicates that the district currently has 20% excess capacity at the elementary level and 20% - 25% additional capacity at the Middle and High school level when compared to benchmark. As enrollment continues to decline utilization will also decline.

***** Please note that this analysis is comparing enrollment and capacity only; it does not consider additional space required due to educational program needs.**

EDUCATIONAL FACILITIES EVALUATION CRITERIA

Methodology and Approach

In order to adequately assess the educational facilities it is imperative that a baseline, or benchmark be established, from which evaluations and any subsequent recommendations are based upon. In completing the facilities assessment and evaluation, Crabtree, Rohrbaugh & Associates, working with School District staff, developed and utilized several tools to assist in the process. They include the following:

- Building surveys and documentation
- Meetings with staff
- Use of an Evaluation Criteria as a benchmarking tool
- Lifespan of Building Components

Evaluation Criteria

The criteria is based on the educational program needs as well as life cycle costs and life span expectations, maintenance needs, energy efficiency, and current applicable accessibility, life safety and building code considerations.

The following building codes are applicable:

International Codes:
- International Building Code (IBC)
- International Existing Building Code (IEBC)
- International Energy Conservation Code (IECC)
- International Fire Code (IFC)
- International Fuel Gas Code (IFGC)
- International Mechanical Code (IMC)
- International Plumbing Code (IPC)

National Fire Protection Association (NFPA), including, but not limited to:
- NFPA 1 - Fire Code
- NFPA 10 - Standard for Portable Fire Extinguishers
- NFPA 13 - Standard for the Installation of Sprinkler Systems
- NFPA 70 - National Electrical Code (NEC)
- NFPA 72 - National Fire Alarm and Signaling Code
- NFPA 80 - Standard for Fire Doors and Other Opening Protectives
- NFPA 90A - Standard for the Installation of Air-Conditioning and Ventilating Systems
- NFPA 90B - Standard for the Installation of Warm Air Heating and Air-Conditioning Systems
- NFPA 92 - Standard for Smoke Control Systems
- NFPA 101 - Life Safety Code

The Pennsylvania Code, including, but not limited to:
- Chapter 3a - Boiler and Unfired Pressure Vessel Regulations
- Chapter 7 - Elevators, Lifts, Escalators, Dumbwaiters, Hoists and Tramways

Pennsylvania Department of Health

Pennsylvania Interscholastic Athletic Association (PIAA), including the National Federation of State High School Associations (NFSHSA)

Local Municipal Zoning Ordinances

NOTE: Existing facilities meet codes applicable at the time of their construction. Code issues identified in this report are those that would be required to meet current codes. Several of the code required upgrades are considered safety issues and should be addressed by the school district.

The evaluative criteria for the review of the educational facilities are organized into the following categories:

- **ADA AND BUILDING CODE CRITERIA**
- **PHYSICAL PLANT CRITERIA**
- **EDUCATIONAL PROGRAM CRITERIA**

The Cost Estimate

The estimated costs listed for each item of work are preliminary based on visual observation of the condition present during the site inspections. In general, the costs are allowances for all work associated with the improvement. For example, providing a sprinkler system includes allowances for ceiling removal and replacement, cutting and patching, supplying water to the site, and reconfiguring space to provide the equipment. Cost are based on all work included in the report is performed under one contract. **COSTS SHOULD BE ADJUSTED FOR INFLATION FROM THE DATE OF THIS REPORT.**

ADA AND BUILDING CODE CRITERIA

A. ADA Compliance

Recommendations in this report regarding upgrades related to the Americans with Disabilities Act are made when buildings or areas of a building can be made accessible without "undue burden". "Section 35.150 requires that each service, program, or activity conducted by a public entity, when viewed in its entirety, be readily accessible to and usable by individuals with disabilities."

ADA Regulation for Title II, as printed in the Federal Register (7/26/91).

1. Exterior Routes

At least one accessible route shall be provided within the boundary of the site from accessible parking spaces, passenger loading areas and public streets and walks to an accessible building entrance. At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements and accessible spaces that are on the same site. Handicapped access to grade (accessible entrances) shall be provided at a minimum of 50% of all public entrances.

2. Parking

Property configured and marked accessible parking spaces shall be provided per code requirements.

Total Parking in Lot	Required Minimum Number of Accessible Spaces
1 to 25	1
26 to 50	2

51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total

3. Exterior Signage Proper signage shall be provided on-site to designate handicapped accessible route(s) to the building and related facilities. If a particular entrance is not made accessible, appropriate accessible signage indicating the location of the nearest accessible entrance(s) shall be installed at or near the inaccessible entrance, such that a person with disabilities will not be required to retrace the approach route from the inaccessible entrance.

4. Interior Routes At least one accessible route shall connect accessible building or facility entrances with available programs within the building. The path of travel to an altered area and the restrooms, telephones, and drinking fountains serving the altered area, shall be readily accessible to and usable by individuals with disabilities.

5. Railings Handrails and railings on stairs and/or ramps shall be designed to meet code requirements. Ramps shall have a maximum slope of 1 to 12.

6. Elevator One passenger elevator shall serve each level providing programs to the public including mezzanines, in all multi-story buildings.

7. Doors At each accessible entrance to a building, at least one door shall meet code width and maneuvering clearances. Door openings are to be a minimum clear width of 32" and a minimum clearance of 4'-0" shall exist between pairs of entrance doors in vestibules. Each door that is an element of an accessible route or means of egress shall meet the width and maneuvering clearances per code requirements.

8. Egress/ Area of Rescue Assistance Areas of Rescue Assistance shall be provided where there is no direct egress to grade. The total number of areas per story shall be not less than 1 for every 200 persons of calculated occupant load served by the area of rescue assistance. Area of Rescue Assistance may not be required if the building is fully sprinklered.

9. Interior Signage Proper signage shall be placed throughout the building to adequately identify accessible routes and areas of rescue assistance. Room identification signs throughout the building shall be in compliance with ADA.

10. Hardware Door locksets to all accessible spaces should be lever-type accessible units. Door closers should meet pull load requirements.

11. Restrooms Existing toilet room facilities on each level of a building shall be accessible or an accessible toilet room shall be provided near the existing facilities. Additional toilet facilities shall be accessible when required by the program or service provided.

12. Fountains

At least one accessible drinking fountain should be provided on each level of a building and 50% of the total number of drinking fountains provided shall be accessible. Two drinking fountains mounted side by side or on a single post, are usable by people with disabilities and people who find it difficult to bend over. Knee clearances shall not be required at units used primarily by children ages 12 and younger where clear floor space for a parallel approach is provided and where the spout is no higher than 30 in, measured from the floor or ground surface to the spout outlet.

13. Fire Alarm

Visual strobe alarms are to be provided in toilet rooms and other general use areas. (Meeting rooms, lobbies, corridors and common use areas.)

14. Telephone

If public pay telephones are provided, they are to be accessible. An accessible telephone shall meet the maneuvering clearances per ADA requirements and be mounted at the proper height. TDD or equally effective telecommunication systems shall be available to communicate with individuals with impaired hearing or speech.

15. Seating

In places of assembly with fixed seating, accessible wheelchair locations shall be provided. At least one companion fixed seat shall be provided next to each wheelchair seating area. When the seating capacity exceeds 300, wheelchair spaces shall be provided in more than one location.

Capacity of Seating in Assembly Area	Number of Required Wheelchair Locations
4 to 25	1
26 to 50	2
51 to 300	4
301 to 500	6
over 500	6 plus 1 additional space for each total seating capacity increase of 100

16. Workstations

Accessible workstations in core spaces in the elementary school level such as art rooms, the library/media center, computer labs and other core subject spaces in the secondary level should be provided.

17. Performance Areas

An accessible route shall connect wheelchair-seating locations with performing areas, including stages and spaces used by the performers such as dressing rooms or locker rooms. An Assistive Listening System (ALS) should be provided and located within 50 feet viewing distance of the stage or performing area and shall have a complete view of the stage.

Site Code Compliance

A. Security: Vehicular routes and pedestrian paths should be clear in terms of field of view. Pedestrian paths shall be well lighted.
B. Vehicular Circulation: Safe drop-off facilities should be provided for each bus, automobile, and service vehicle traffic. Cross traffic between vehicles and pedestrians should be eliminated or minimized.
C. Parking: Vehicular parking shall be designed to meet local municipal authority requirements. An adequate amount of parking should be available for students, staff and visitors.
D. Fencing: Fences should have properly functioning gates and contain no rust or loose posts or fabric.
E. Drainage: Storm water management shall be designed to meet local municipal authority requirements. Wet and dry ponds shall be properly marked and separated from student activities. Walks and drives shall be properly drained to prevent icy conditions in winter.

Building Code Compliance

A. Security: Entries shall be observable and promote scrutiny of visitors. Access to roof and other high areas shall be secured.
B. Means of Egress: Interior elements comprising means of egress shall be continuous and unobstructed from any space within the building to the exit discharge in accordance with local building codes.
C. Fire Alarm System: There should be a NFPA 70 panel, connected to the local fire department for alarm with localized alarm stations as required with available spare parts and maintenance service.
D. Annunciator: There should be a NFPA 70 remote panel in an easily accessed area, well protected, with available parts and maintenance service.
E. Fire Suppression System: An automatic fire suppression system shall be installed throughout all buildings in accordance with local building codes.
F. Fire Extinguishers: Fire extinguishers shall be an approved type, depending on the room or area use in which it serves, to meet local building code criteria for quantity and spacing and shall be mounted at the proper height to meet accessibility requirements. Fire extinguishers shall be annually serviced by licensed personnel and inspected monthly by building operations employees.

Additional Evaluation Criteria

Aside from code standards, other evaluation criteria includes, but is not limited to, the following:

- ◊ Pennsylvania Department of Education (PDE) standards, including the Public School Code
- ◊ Physical Plant, including overall condition of materials, systems and components
- ◊ Aesthetics/Environmental Qualities
- ◊ Educational Program

PHYSICAL PLANT CRITERIA

Site Condition

A. Paving: Asphalt paving should be in good condition, showing no signs of deterioration or cracking. Storm water should be diverted to drainage inlets with no ponding.

B. Walkways: Concrete sidewalks should be in good condition, showing no signs of deterioration, major cracks or tripping hazards.

C. Play Equipment: Play equipment should be located in a safe area of the site with no broken or rusted equipment. It should be age appropriate. Depending on location or environmental surroundings, play equipment may also need to be enclosed by a protective or visual barrier, such as a fence.

D. Service Area: The service area should be properly located near food services, mechanical rooms and receiving/storage areas. The service area should be separate from pedestrian and play areas, with trash and recycling containers away from the building and properly screened.

E. Student Loading: Adequate space should be provided for bus loading, as well as staff and visitor parking. Vehicular and pedestrian traffic are to be separated as much as possible.

F. Landscaping: Landscaping should be attractive, conducive to activity and well-maintained.

Building Condition

A. Foundations: All footings shall bear on suitable soil; concrete slabs shall be over compacted grade.

B. Structural System: Structural systems should be intact with no uncertified modifications. There should be no evidence of significant cracking or settling of structural components.

C. Energy: Buildings should meet or exceed ASHRAE 90.1 Standards.

D. Roofing System: Roofing systems should be in maintainable condition with adequate slope for drainage.

E. Exterior Envelope: Exterior walls should be masonry cavity wall on masonry backup with adequate insulation or masonry cavity wall on metal stud and reinforced gypsum wallboard with adequate insulation. Insulation should only be located in the wall cavities, on the outboard side of the backup materials, not within stud cavities. Alternative or accent materials may include precast concrete or cast stone masonry components and prefinished metal siding or paneling, including factory-insulated types. Although considered by some to be economical, attractive or energy-efficient, exterior insulated finish systems (EIFS) is not a recommended exterior envelope system due to a variety of reasons, including premature failures of finish coats and bonding systems and lack of resistance to damage from impact.

F. Exterior Trim: Exterior trim should be heavy-gauge metal or wood with no rotted areas, completely finished and properly fastened.

G. Windows: Windows, including storefront and curtain wall systems, should be clear or tinted glass units, in thermally-broken aluminum frames. Aluminum-clad wood with undamaged finish can be a viable alternative to aluminum units, although their life expectancy is considerably less. Windows should be easily operable and have proper caulking.

H. Exterior Doors: Exterior doors and frames should be galvanized hollow metal or finished aluminum. In addition, they must swing in the direction of egress travel, and be accessible.

I. Interior Walls: Interior partitions should be structurally sound, free of finish defects and have adequate acoustical properties. Concrete masonry units should be located in high-traffic areas, while gypsum wallboard on metal stud framing may be located in spaces that typically receive little abuse.

J. Interior Doors: Interior doors should preferably be solid core wood in painted metal frames. Doors should have undamaged finish and swing in the direction of egress.

K. Interior Glass: Interior glass should be ¼-inch tempered or safety glass, or fire-rated glass where required. Glass consisting of metal wire is no longer permitted in school buildings due to potential safety hazards.

L. Kitchen Equipment: Equipment should be properly located to accommodate both safety and traffic. Equipment should be stainless steel wherever possible, in good working condition and in compliance with all applicable health and sanitation codes. Fire suppression systems at ventilation/exhaust hoods should be compliant with all current, applicable fire codes.

M. Athletic Equipment: Athletic equipment and bleachers should be in good working condition and meet the minimum safety and accessibility requirements. Basketball backstops and related equipment should be in good working condition with appropriate safety measures for operation.

Interior Finishes Condition

A. Terrazzo Floors: should contain no large cracks and have smooth transition to adjacent floor surfaces with no stains or deteriorated areas.

B. Resilient Flooring: Resilient floor surfaces, including vinyl composition tile (VCT) and sheet vinyl, should be free of defects, with no cracks, open seams or missing tiles. Asbestos-containing floor tiles should be identified and be included in the school district's operation and maintenance plan.

C. Carpeting: Carpet should have tight seams, with no unraveling or exposed/frayed ends. Units should have anti-microbial treatment and be stain resistant where applicable. Area rugs should be non-slip type with no tripping hazards.

D. Ceramic Tile: Ceramic tile should be free of cracked, loose, missing or broken tiles with adequate waterproof grout.

E. Wood Flooring: Wood floors, including floating athletic systems and traditional strip flooring over sleepers, should have appropriate finish and smooth transition to adjacent floor surfaces. They must allow for movement without buckling or spreading. There should be no squeaky or soft spots.

F. Ceiling Tile: Ceilings should contain no stained, broken or warped tiles, and the grid should be adequately secured to the floor or roof structure above.

G. Gypsum Wallboard: Wallboard should have smooth, clean surface with no damage or stains and appropriate transition to adjacent ceiling materials. Wallboard should not be used in areas subject to heavy contact or abuse.

H. Paint: Painted surfaces should have a smooth finish, with no peeling or stains. Appropriate colors and glosses should be chosen for reduction of glare, for light reflectivity and overall compatibility with use of space. Lead-based paint should not be present.

Specialties Condition

A. Casework/Millwork: Cabinets and custom millwork should have a solid wood or particleboard core with a high-density plastic laminate or natural wood veneer finish. Plastic laminate or solid surfacing/simulated stone countertops and backsplashes should be used, depending on use/location and budget. Chemical-resistant countertops should be provided in science labs where appropriate. Surfaces should be undamaged with properly functioning hardware. All units shall meet accessibility requirements, including work surface heights and knee space clearance, as applicable.

B. Visual Display Boards: Chalkboards should be magnetic, solid construction with no surface cracks or exposed edges. Whiteboards are to be provided in classrooms and all other

teaching station spaces. Tackboards should consist of self-healing surfaces. All units should have perimeter aluminum or wood frames with mitered corners and accessories as needed, including trays and flag and map holders.

C. Toilet Partitions: Partitions and urinal screens may be painted, galvanized steel, but preferably solid phenolic type. Partitions should be floor-supported and overhead-braced, unless the more expensive overhead-supported type is warranted. Panel surfaces should not be dented, bent or rusted and all hardware should be present and in good working condition. Units should be arranged to accommodate handicapped individuals as necessary.

D. Lockers: Lockers should be heavy gauge steel with painted finish. Athletic lockers should be extra-heavy duty or all-welded construction, property vented. Lockers should be in good physical condition with no dents or rust and all hardware should be present and in good operating condition. Accessible lockers and benches should be located as required by applicable code.

E. Operable Partitions: Including panel or accordion type, partitions should be secured properly to the building structure. They should be easy and safe to operate. The sound transmission rating is to be suitable for its intended use.

F. Acoustics: Acoustic separation should be provided between assembly spaces and instructional areas. Large assembly areas, such as auditoriums, gymnasiums, multipurpose rooms, cafeterias, music rooms, libraries and large public lobbies should be designed to properly attenuate and distribute sound in order to reinforce the program use.

HVAC Condition

A. System Design: HVAC System installed should be one that is the most ideal and current for the type of building. Equipment and air distribution should contain fire protection devices such as fire dampers and duct smoke detectors to meet current local code and life safety requirements.

B. Ventilation: Outside air quantities should be designed per local code requirements.

C. Exhaust: Proper quantities of exhaust air should be provided in toilet rooms, science rooms, mechanical rooms, kitchen, maintenance closets, storage rooms and copy rooms.

D. Distribution: HVAC piping and ductwork should be in good condition.

E. Equipment: HVAC equipment should be well maintained and in good working condition to operate within the system design. Equipment should be designed to meet local building code requirements. Automatic temperature control systems should be current and have energy management capabilities.

Plumbing Condition

A. Distribution: Sanitary drainage, domestic water and gas piping should be in good condition and operating within system design. Hot water supply shall be provided to every hand sink within classrooms, restrooms, kitchens and custodial closets.

B. Plumbing Fixtures: Plumbing fixtures should be well maintained and in good working condition to operate within the system design. They shall accommodate the adult or child dimensions and anthropometrics, respectively for their users.

C. Equipment: Plumbing equipment should be well maintained and in good working condition to operate within the system design.

Electrical Condition

A. Interior Fixtures: Light fixtures should have energy-efficient long life lamps with non-PCB ballasts, preferably LED types. Fixtures should have undamaged finishes and lens with no

cracked or discolored items. Illumination levels should meet the minimum criteria based on foot-candle (fc) levels established by the Illuminating Engineers Society (IES). Applicable parameters are as follows:

Classrooms	50 – 100 fc	Cafeterias	10 – 20 fc
Libraries	20 – 50 fc	Kitchens	50 – 100 fc
Offices	20 – 50 fc	Laboratories	50 – 100 fc
Office Task	50 – 100 fc	M.P. Rooms	30 fc
Toilets	10 – 20 fc	Parking	1 – 2 fc
Corridors	10– 20 fc		
	11		
	12		

A. Exterior Lighting: There should be high-pressure sodium, or more preferably LED, wall-mounted lights around the perimeter of building and the lights should be photocell or time clock controlled. There should be 400-watt lights mounted on 35-foot-high light poles providing 1 to 2 fc to all parking areas.

B. Power Supply: Power supply should be 480/277-volt, 3-phase, 4-wire from the power company. The transformer should be located in a safe isolated area.

C. Service: Service box should have a functional panel cover and lock, available replacement branch devices and expansion capacity.

D. Distribution: Equipment should have functional panel covers and locks with 480-volt, 3 phase for power to HVAC and other heavy equipment; 277-volt, 3-phase for interior or lighting distribution; available replacement parts. All panel schedules shall be accurately labeled.

E. Transformers: There should be 480 120/208-volt, 3-phase step-down transformers for power to receptacles and other small 12-volt equipment.

F. Wiring: There should be no signs of deteriorating insulation or loose connections.

G. Receptacles: Receptacles should be grounded type with no broken covers. They should be appropriately located for program needs. Shutter type safety receptacles should be provided in play areas; ground fault interrupters are required at wet areas. Mounting heights of outlets and switches should follow accessibility requirements.

H. Emergency Generator/Battery packs: Emergency generators should be property located and sized to meet desired emergency load requirements.

I. Public Address System: System should be fully automatic; main power should control all speakers and provides signals to bell system for fire drills and alarms.

J. Speakers/Call Intercom System: Speakers should be provided in every classroom for two-way communications and safety.

K. Clocks/Bells: Analog or digital clocks should be installed in each instructional space and should also be connected to the master clock system. Clocks and bells should be on the automatic system.

L. Telephone System: A telephone system should be provided and available within the capabilities of the Public Address System. Specific functioning and use of the system should be programmed from the central control unit.

M. Television/AV CATV System: There should be empty conduits or cable trays to instructional areas to allow for television cables. Wiring and installation of a television system should be

per the educational specifications. Every instructional space should be served by the system.

N. Data Transfer System: Data systems should be implemented to meet the educational needs of the facilities and a long-range technology plan. Systems should be flexible and adaptable for future technological changes. A building-wide cable distribution system should be provided for installation of present and future low voltage special systems cable. Provide racks for LAN distribution equipment at designated network hub locations.

Typical Life Expectancy of Building Materials & Components

General Building Systems	Range of Years				
	10 - 20	20 - 30	30 - 40	40 - 50	50 +
Site Work					
Concrete pads and sidewalks	■	■			
Bituminous paving	■	■			
Site water lines	■	■	■		
Site sewer lines	■	■	■		
Site stormwater systems	■	■			
Site sewage system	■				
Site electrical lines	■	■	■		
Fencing	■				
Playground equipment	■				
Foundations & Structure					
Foundation Walls / Footings	■	■	■	■	■
Concrete slab on grade	■	■	■	■	■
Concrete floor & metal deck system	■	■	■	■	■
Steel floor structure	■	■	■	■	■
Steel roof structure	■	■	■	■	■
Building Envelope Systems					
Exterior wall- masonry	■	■	■	■	■
Exterior wall- wood cladding	■	■			
Aluminum windows	■	■			
Aluminum / hollow metal doors	■				
Trim- soffit, fascia, etc.	■	■			
Roofing- built-up system	■	■			
Roofing- single ply EPDM	■	■			
Roofing- asphalt shingles	■				
Roofing- seamed metal	■	■			
Skylights	■	■			
Rainwater gutters / spouting	■	■	■	■	
Rainwater downspouts	■	■			
Interiors					
Walls- masonry	■	■	■	■	■
Walls- drywall/plaster & stud	■	■	■	■	■
Floors- terrazzo	■	■	■	■	■
Floors- wood	■	■	■		
Floors- vinyl	■				
Floors- ceramic	■	■	■	■	

Floors- carpet					
Ceilings- drywall/plaster					
Ceilings- acoustical tile					
Wall / ceiling paint					
Interior doors- wood w/ metal frame					
Interior door hardware					
Operable partitions					
Specialties, Equipment & Furnishings					
Casework- wood					
Casework- plastic laminate					
Chalkboards & tackboards					
Projection screens					
Lockers					
Kitchen equipment					
Toilet partitions					
Toilet accessories					
Cafeteria tables					
Auditorium seating					
Library furniture					
Gymnasium bleachers					

Mechanical, Plumbing & Electrical	Range of Years				
	10 - 20	20 - 30	30 - 40	40 - 50	50 +
Heating, Ventilation & Air Conditioning					
Boilers					
Unit ventilators					
Fan coil units					
Steam heat system					
Gas heat system					
Oil heat system					
Central air conditioning system					
Local (window) air conditioning system					
Ductwork, diffusers, grilles, etc.					
Dampers					
Burners					
Expansion tanks					

Plumbing Systems					
Domestic water piping- copper	■	■	■	■	■
Domestic water piping- PVC	■	■	■	■	■
Sanitary piping- cast iron	■	■	■	■	■
Sanitary piping- PVC	■	■	■	■	■
Gas-fired tanks	■				
Electric-fired tanks	■				
Steam-fired tanks	■	■			
Backflow preventers	■	■			
Pumps- constant pressure	■	■			
Pumps- recirculation	■				
Pumps- sewer	■	■			
Neutralization tanks	■	■	■	■	■
Expansion loops	■	■	■	■	■
Mixing valves	■				
Gas piping (low pressure)	■	■	■	■	■
Gas meter / regulator	■	■	■	■	
Sprinklers	■	■	■	■	■
Standpipe	■	■	■	■	■
Fixtures- toilets, urinals, lavoratories	■	■			
Fixtures- water coolers, drinking fountains	■	■			

Electrical Systems					
Power supply	■	■	■		
Power service	■	■	■		
Distribution panels	■	■	■		
Wiring, receptacles & switches	■	■	■		
Transformers	■				
Lighting- exterior	■	■	■		
Lighting- interior	■	■	■		
Generator	■	■	■		
Exit signs	■	■			
Fire alarm panel	■	■			
Fire alarm- graphic annunciator	■	■			
Smoke / heat detection system	■	■			
Public address system	■				
Telephone system	■				
Television system	■	■			
Security system	■				
Clock / bell system	■	■			
Speakers	■	■			
Communications wiring	■				

EDUCATIONAL PROGRAM CRITERIA

Educational Specification

Program revisions should meet the intent of the educational specifications, the long range or strategic plan and the district technology plan within the framework of a limited budget.

Technology should be incorporated into all areas of the curriculum within the parameters of the District's technology plan.

The media center should be equipped with current technology to allow for on-line searching and centralized media distribution.

Public use facilities should be easily accessible and located near building entrances, adjacent to vehicular parking.

Educational Program Requirements

Over time, as student population changes along with educational curriculum, concepts and trends, technological advancements, community interaction and social shifts, quite often buildings do not evolve to meet the latest demands. In order for upgrades to be incorporated into the facilities to meet current and future educational and community needs, various criteria that will have an ongoing impact on the physical attributes of the school should be examined. The following are some examples:

- ◊ Basic Needs: Define what the existing facility/space needs in order to carry out the current and prospective educational program; list what is missing, non-functional, outdated, undersized, inadequately equipped, etc. Furthermore, determine which spaces are limited or non-existent, but needed in order for the educational program to be implemented.
- ◊ Instructional Space: Determine the manner in which enclosed rooms or open spaces should be designed to meet the minimum size requirements and specific use of what is being (or will eventually be) taught and learned to support the current and future curricula.
- ◊ Spatial Arrangement: Spaces shall be constructed, equipped and furnished to accommodate the specific use of the space. For instance, for spaces that will primarily be used for lecture-type instruction, permanent building elements and equipment may be needed, while multiple small group activities, hands-on learning and collaborative learning may require flexible construction with moveable/portable equipment and furnishings.
- ◊ Specialized Learning: Growing needs of special education and learning/emotional support functions require additional and/or adaptive space.
- ◊ Technology: As technology evolves, so does the teaching-learning process; this includes how wireless laptop computers and handheld devices help facilitate independent and group learning, collaboration and presentation processes, and how the environments are laid out.
- ◊ Community: Determine the locations, types and sizes of spaces that will be used solely or partially by the community.
- ◊ Support Spaces: List which types, sizes and locations of spaces are needed (or missing) to support the educational program/spaces, such as storage and prep rooms.
- ◊ Applied Arts: Define the size, location and adjacency requirements needed for practical/applied arts, such as Art, Music, Performing Arts, Technical Education and Family & Consumer Science, as well as how these spaces should interact with one another.

- ◊ Core Spaces: Provide a list of core spaces needed to support current and future enrollment, educational program, athletics/extracurricular activities and community use, including Media Center, Gymnasiums, Auditorium, Cafeteria, and Commons Areas; also consider adjacencies, amenities, technology, equipment, furnishings and support spaces (i.e. offices, locker rooms, dressing rooms, kitchen, etc.) needed for these areas.
- ◊ Environment: Define which environmental benefits can be utilized, both as a physical example and a teaching tool (i.e. building receives solar panels to save/generate electricity; students do research to determine how much energy the school is saving).
- ◊ Meeting Spaces: Examine the types, sizes and quantities of meeting spaces, such as conference rooms, offices and small and large group instruction spaces, that will be needed for meeting with students, parents, faculty/staff and community members; determine the level of privacy that is needed, including acoustical qualities, as well as technology, equipment and furnishings.

Elementary Schools

A. Layout: The elementary schools should support the educational programs and contain sufficient space to accommodate specialized support programs and services.

B. Site: The elementary schools should be located on a site adequately sized to provide for safe student pick-up and drop-off, student pedestrians, visitor and staff parking and athletic fields for student and community use. In addition, adequate and safe play structures should be provided for student use. According to the Pennsylvania Department of Education (PDE) planning guidelines, an elementary school site should contain a minimum of 10 acres, plus one additional acre for each 100 students.

C. Core Spaces: Core spaces for special subjects and support spaces should be centrally located and easily accessible. Core spaces shall meet or exceed PDE guidelines.

1. All schools should have a room designed for separate art and music instruction. Schools with a student capacity of 250 or more students should have a separate room for each art and music.
2. All schools should have a space suitable for physical education. Schools with a capacity in excess of 250 students should have a separate room suitable for physical education, or have a multipurpose room large enough to allow for simultaneous use of each side of the multipurpose room.

Middle Schools

A. Layout: The middle school should support the educational programs and contain sufficient space to accommodate specialized support programming and services.

B. Site: The middle school should be located on a site adequately sized to provide for safe student pick-up and drop-off, student pedestrians, visitor and staff parking and athletic fields for students and community use. According to the PDE guidelines, a middle school site should contain a minimum of 20 acres, plus one additional acre for each 100 students.

C. Core Spaces: Core spaces for special subjects and support spaces should be centrally located and easily accessible. Core spaces shall meet or exceed PDE guidelines.

High Schools

A. Layout: The high school should facilitate specialization by students to achieve their future educational and career goals. The school should support the educational program and contain sufficient space to accommodate specialized support programming and services.

B. Site: The high school should be located on a site adequately sized to provide for safe student pick-up and drop-off; student pedestrians, visitor, staff and student parking and

athletic fields for student and community use. According to the PDE guidelines, a high school site should contain a minimum of 30 acres, plus one additional acre for each 100 students.

C. Core Spaces: Core spaces for the special subjects and supporting spaces used by all students should be centrally located and easily accessible. Core spaces shall meet or exceed PDE guidelines.

Aesthetics / Environmental Conditions

All building materials, finishes, systems and components require regular cleaning and repairs in order to maintain reasonable levels of performance and appearance. Following manufacturer guidelines, preventative maintenance, including minor repairs and cleaning procedures, will enhance the longevity of various items throughout the building, which may meet or exceed their life expectancy (see charts above).

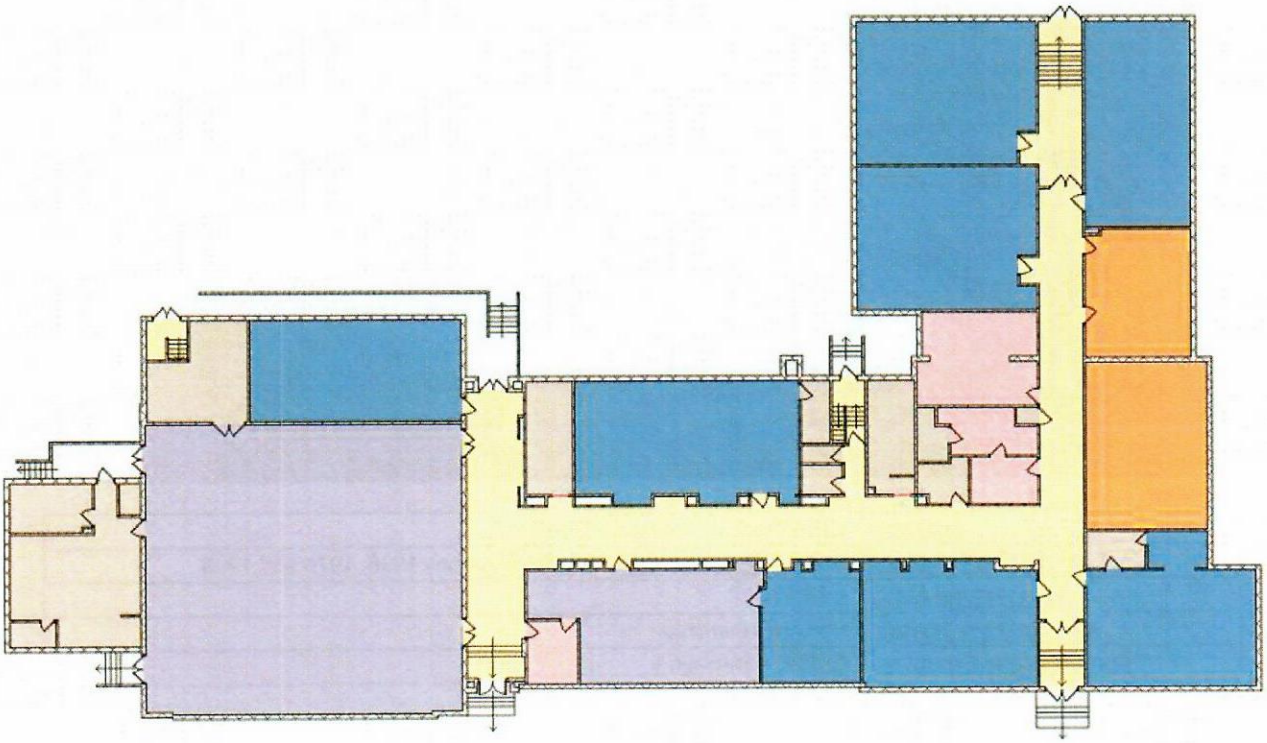
However, in terms of finishes, including the arrangement/composition of finishes, attention should also be directed toward aesthetics. Several materials and finishes can last well beyond their anticipated life expectancy, which can often carry an outdated appearance. In other words, materials and finishes that are still in place from 50 or more years ago, although still in relatively sound condition, may not necessarily meet standards in providing a fresh, visually-appealing, uplifting, modernized appearance. Updating materials and finishes, including merely changing a color, can make a significant difference in how a building or space is perceived. It is equally important to use durable materials and finishes that will endure the natural elements and physical wear and tear of typical usage. Materials and finishes should also be environmentally friendly and contain inherent qualities such as acoustical control, light reflection/ absorption, slip-resistance and barrier-free (accessible) properties.

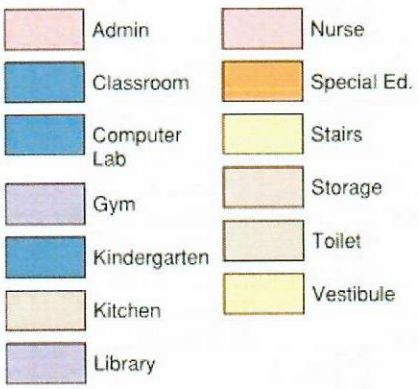
HOWARD ELEMENTARY SCHOOL

Overview:

Address:	255 School St, Howard, PA 16841
Construction Timeline:	Built 1922; Additions and/or Renovations 1936, 1970 and 1998
Architectural Area:	± 17,527 SF
Municipalities Served:	Howard Township
Current Grade Grouping:	Grades K through 5

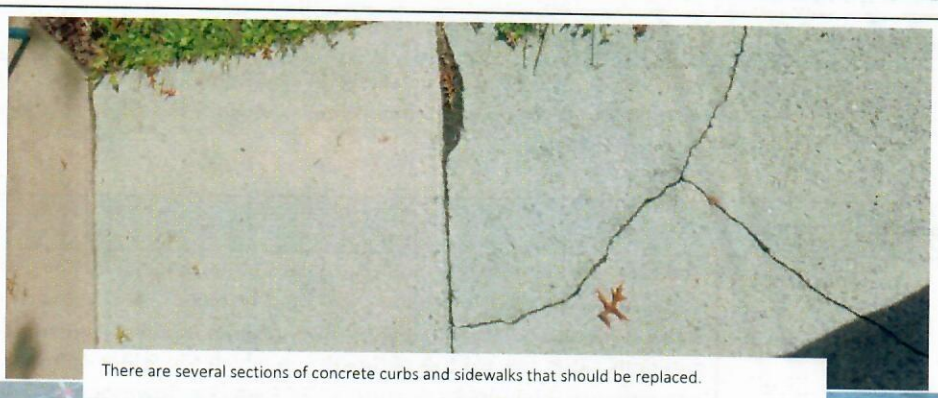
HOWARD ELEMENTARY SCHOOL – EXISTING FLOOR PLANS



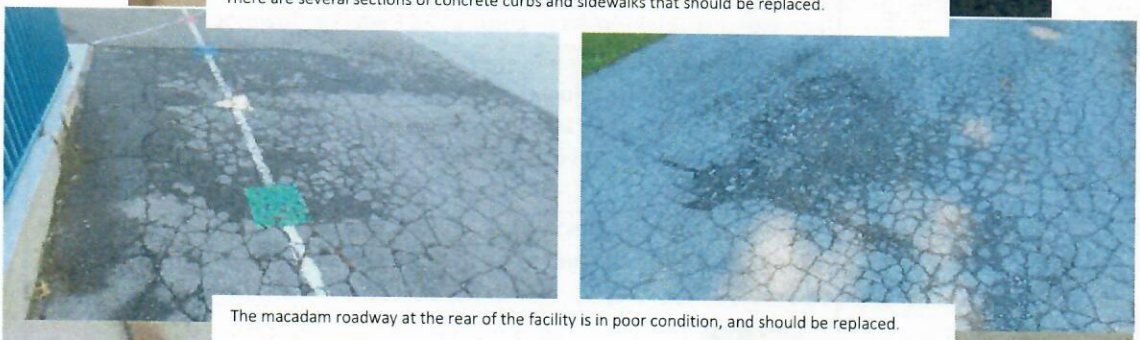


Educational Space Considerations:		
Educational considerations noted below are based on PDE and general planning / design guidelines.		
Classrooms:		Classrooms are sized appropriately. Visual display equipment, casework and finishes are in good condition in most spaces. Entrances meet code-required egress widths and clearances.
Special Education Classrooms:		Room appears to be adequately sized and equipped. Visual display equipment, casework and finishes are in good condition. Entrance meets code-required egress width and clearances.
Small Group/Reading Room:		Space identified as Reading Room, used for formal or informal instructional and small group functions. Visual display equipment, casework/equipment & finishes are in good condition.
Art/Music Classrooms:		Adequately sized with ample storage space/rooms. Visual display equipment, casework and finishes are in good condition.
Computer Room:		One space; inadequately sized. Visual display equipment, casework and finishes are in good condition.
Media Center (Library):		Adequate size, with sufficient support spaces, including office/workroom, A/V storage and story area. Visual display equipment, casework, millwork, library furniture & finishes are in good condition.
Cafetorium:		Appropriate size for dining, physical education, large group meeting and performance activities. Visual display, stage and athletic equipment and finishes are in good condition..
Kitchen:		Adequate size preparation and support spaces. Food service prep and serving equipment and finishes are in good condition.
Administration Area:		Includes School Office, Guidance and Nurse. Size, location and adjacencies to one another and each other is good, although there is no secure entrance into the office. Equipment, casework and finishes are in good condition.
Storage:		Appears to be an adequate amount of general and specific storage rooms/areas, especially in the basement level.
Building Support:		Various mechanical, electrical, custodial and restrooms. The lower basement/crawlspace is unsuitable for use.
Building Codes:	All projects are to be governed under the provisions of the current Pennsylvania Uniform Construction Code (PA-UCC, including applicable International Code Council family of codes), PA Department of Labor & Industry (L&I), Americans with Disabilities Act Accessibility Guidelines (ADAAG) and local municipality amendments and requirements.	

Building Considerations	
Site Conditions	
General Site Information:	The elementary school is located on a ±6-acre site. The school is located in a residential neighborhood, surrounded by single/multi-family housing
Topography:	The site is primarily moderate-sloping with mild transitions around the building perimeter, especially at the rear. The main floor of the existing building requires steps/ramps to access the facility. Overall, depending on the location, size and orientation of any necessary future additions, expansion may be a challenge, given the existing site size and boundary.
Site Circulation:	Parent drop off occurs at the front of the building. School bus drop off occurs at the rear of the building, adjacent to the school is bounded by School Street on the south side, with playfields and paved play areas to the north and east, and Howard Christian Church to the west.
Site Entrance:	There is one entry/exit point off of School Street, in which cars and buses access the site via the west- and discharge at the east.
Play Areas:	There is one large playground to the north west of the building. The playground is accessed either by a set of steps from the lower parking lot or via a ramp from the Cafetorium; asphalt-paved play courts with game lines. There is a large grass play area to the north east, with baseball infield to the far edge of the property. The surfaces and equipment of the play areas appear to be in good-fair condition, with cracking and spalling macadam.
Storm Water Management:	There does not appear to be any storm water problems.
Parking:	A parking lot is located the east, and accessed from the School Street. The parking area adjacent to the main entrance is for administrators and visitors. Overall, the asphalt paving parking lot and driveway paving appears to be in fair to good condition.
Accessibility, Walkways and Curbing:	The main entrance of the building does not meet minimum handicapped accessibility requirements, requiring stairs to access the entrance. The entrance doors are not sized appropriately to permit accessibility. There are some exterior doorways that step down to the pads. Concrete sidewalks, plazas and curbs appear to be in fair to good condition. *Concern: Some of the sidewalks and curbs were previously replaced, although there are some locations that are badly cracked.*
Site Amenities:	n/a.
Site Lighting:	n/a.



There are several sections of concrete curbs and sidewalks that should be replaced.

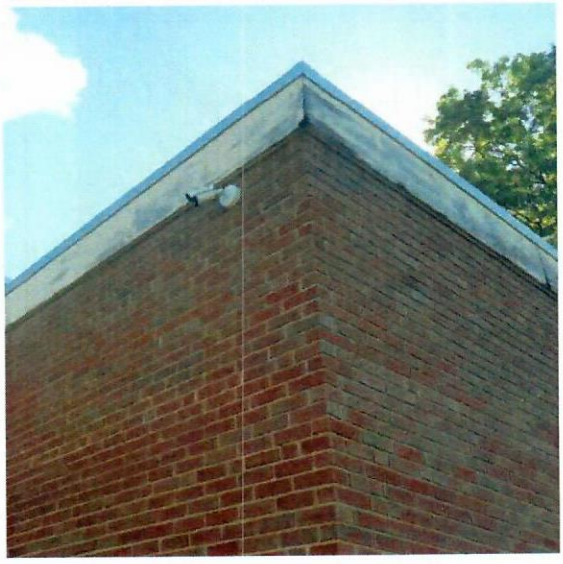


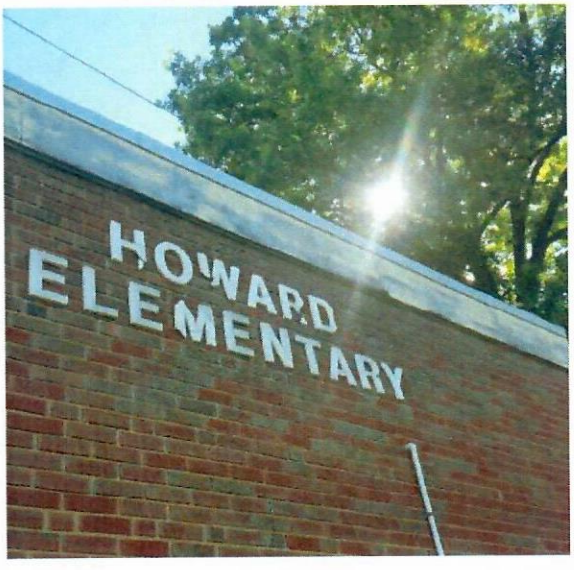
The macadam roadway at the rear of the facility is in poor condition, and should be replaced.

RECOMMENDATIONS:

- *Monitor asphalt play areas for wear/damage; sealcoating and restriping/repainting the surfaces may soon be a viable option to help prolong the life of the play area.*
- *Asphalt paving at the rear drive is in poor condition. Several areas were observed with moderate to major cracking, settlement and deterioration. This paved area should be removed and replaced.*
- *Replace damaged sections of concrete curbs and sidewalks where needed.*

Building Structure	
Structural System:	Primarily a one-story structure with basement beneath; the structural system is both wood and steel-framed construction. The roof deck is also wood and steel.
Exterior Envelope - Roof	
Roof System:	The roof is predominantly asphalt shingles at the original building, and fully-adhered, single-ply membrane over rigid insulation and tapered crickets, structurally-sloped to roof drains; the original building and much of the additions slope toward the perimeter, in which the water commonly flows into either scupper drains or gutters and then into downspouts.
Flashing & Trim:	"Flat" roof edges are capped with a metal fascia/gravel stop system; other flashing includes traditional roof-to-wall terminations. The sloped roof portions consist of standard perimeter/edge trims, such as fascia's, flashings, ridge caps and drip edges. Overall, all the flashing/trim is in good condition.
Soffits/Overhangs:	There are various types and conditions of soffits/overhangs. The have aluminum soffit and trim. The roof trim at the Kitchen area is painted plywood. *Concerns:* • *The recent recoating of the roof membrane is failing. There is evidence of roof leaks at the large Cafetorium space.* • *The Kitchen roof/wall trim is in disrepair and should be replaced with aluminum wrapped fascia.*
Roof Skylights/Glazing:	There are no skylights present.

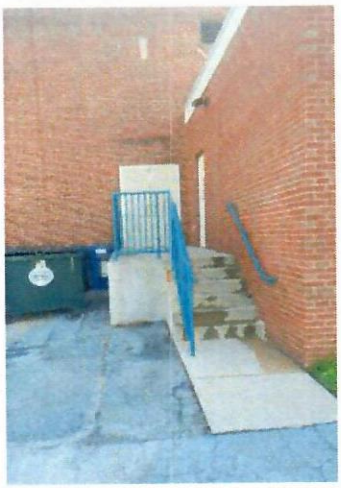




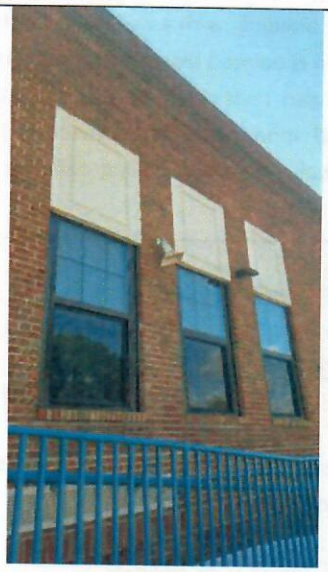
Both pictures depict the condition of the original painted plywood roof fascia trim; the paint is peeling badly and the wood is rotting in some locations; these systems should be replaced with prefinished metal fascia and break metal trim components.

These pictures depict the current condition of the roofing systems. The asphalt shingle roof is in good condition. The coated epdm roof system is failing. Consideration should be made to fully replace the membrane roof areas.

	RECOMMENDATIONS: • *Original roof has been recoated to extend the useful lifespan. This system is beginning to fail. Consider full replacement of single-ply roofing system* • *Replace the wood roof fascia and friezes on the original building with prefinished metal soffit, fascia and break metal trim over new fascia.*
Exterior Envelope - Walls	
Exterior Wall Assemblies:	The exterior walls of the various building eras primarily consist of brick veneer. Brick is in moderate to good condition. *Concerns:* • *Several areas of masonry infill have failing mortar/sealant.* • *Exterior building signage is damaged and should be replaced*
Joints/Sealants:	Control joints are dry and delaminating from the masonry. These joints should be removed and replaced. *Concerns:* • *The condition of most sealant joints, including the most recent addition, is poor; the sealant is badly cracking and shrinking.*
Perimeter sealant:	The perimeter building sealant has failed in total. *Concerns:* • *This condition is currently allowing water to penetrate the joint.*
Exterior Doors:	Exterior doors were replaced during the most recent renovation. The condition of the doors is good. Several doors do not meet current ADA accessibility.
Fenestrations:	Exterior windows were replaced during the most recent renovation. The condition of the windows is good. Windows should be maintained to provide proper functioning and operation.



Above: On left, masonry infill has occurred. The sealant/mortar has failed. This area should be addressed to prevent water penetration. In the center, the concrete stairs have been damaged, creating a tripping hazard. These stairs should be repaired. On the right, the perimeter building sealant has failed in total. This condition is currently allowing water to penetrate the joint. The sealant should be removed and replaced at all wall/hard-surface areas, around the entire building.



	RECOMMENDATIONS: • *Consideration should be taken to undergo a thorough masonry cleaning to help preserve the integrity of the exterior wall envelope assemblies.* • *Strip deteriorated joint sealants and install new elastomeric joint sealants of adequate type; continue to monitor other sealant systems for wear.* • *Repoint missing mortar, and reseal all masonry infill areas.*
Interior Environment	
Interior Finishes:	Walls: In public/circulation areas, such as Lobbies and Corridors, the wall finishes vary depending on their era; most are painted walls with gypsum wall board and/or plaster. Vinyl wall covering is applied at certain areas within the corridors. General classrooms and educational spaces are also painted gypsum wall board and/or plaster. The walls in the Administration Offices and Nurse's Suite are primarily painted plaster. The walls in the Restrooms have ceramic tile (CT) with painted gypsum wall board and/or plaster. There were a few areas showing damage and abuse. The Multipurpose room shows signs of water intrusion from the roof. The gypsum wall board is delaminated from the wall in areas, and requires attention. The majority of the wall finishes appear to be in good, well-maintained condition. Floors: The public/circulation areas have VCT in the corridors. The Classrooms are primarily carpet, with vinyl composition tile (VCT) in the "wet or storage areas." The Media Center, Music Classroom and most of the Administrative Office spaces have carpet, while most of the Nurse's Suite is VCT. The Restrooms have ceramic tile (CT). The Kitchen has quarry tile (QT). Resinous monolithic floor system is in the Multipurpose Room. The floor finishes appear to be in good condition throughout. Ceilings: Suspended acoustical tile ceiling (ACT) systems are the

	predominant ceiling finish throughout the building, with a variety of finishes and applications. The ceiling in the Kitchen is painted plaster, which is easily cleanable. The public circulation areas also consist of ACT, as does the Media Center, Administrative Offices and some educational spaces. The Multipurpose Room has ACT ceilings as well. No major ceiling deficiencies were detected.
	RECOMMENDATIONS: • *Overall, interior finishes appear to be in sound condition and are well-maintained. Maintain existing finishes; repair/replaced finishes as needed under maintenance budget.*
Interior Doors:	Wood Doors in Hollow Metal Frames: Most common type, including Classrooms and Administrative Offices. FRP Doors, Hollow Metal Frames: Most common in utilitarian applications. Aluminum Entrances: At main entrance, exterior locations. *Concerns:* *Overall, door assemblies appear to be in good, sound condition.*
Fire-Rated Openings:	Fire-rated door assemblies exist at fire-rated separations as required by code, which appear to comply.
Accessibility:	It appears that most current accessibility requirements are met, especially where additions and renovations took place. This includes classroom door widths, side clearances, side/frontal approaches, swing direction and glazed opening and hardware locations. *Concern: The two main entrances at the front of the facility are not ADA accessible. Stairs are currently the only means of entrance. The main doors are a pair of 30" wide entrance doors, which do not meet current accessibility standards.*
Door Hardware:	Locksets consist of lever handles, which comply with current accessibility requirements. Egress doors consist of panic device hardware and closers. Fire-rated assemblies consist of latching hardware, closers and magnetic hold-open devices at certain locations.
Toilet Rooms:	Large Restrooms: The group toilet room appear to be fully-accessible and have quality finishes. Stall partitions are aluminum and are in good condition, as are plumbing fixtures. The restrooms appear to have adequate accessories. Single-Occupant Restrooms: The single-occupant restrooms are not ADA accessible; restrooms were upgraded with new finishes, fixtures and accessories, but not in terms of accessibility. *Concerns:* • *Current accessibility standards require vertical grab bars in handicapped toilet facilities, which do not currently exist in this building.* • *Single-use staff and student toilets do not meet current ADA accessibility standards*

Building Service Areas:	There is a dedicated receiving area with an elevated loading dock next to the Kitchen, which is where most deliveries occur for food service and general items. Dumpsters are located adjacent to this entrance on a concrete pad. It appears that the area adequately accommodates delivery trucks and parking.
Equipment and Furnishings	
Casework and Millwork:	The educational and faculty spaces consist of plastic laminate cabinets, countertops and backsplashes. Open plastic laminated shelving line the exterior walls on either side of the unit ventilators. Custom millwork is present at the Media Center circulation desk and Main Office receptionist's desk. Overall, these components appear to be in good condition. *Concerns:* • *The sink base cabinets do not contain open knee space that is required by accessibility provisions; additionally, not all countertop and wall cabinet mounting heights comply.*
Food Service Equipment:	Kitchen equipment appears to meet all health and sanitation codes. *Concerns: The locker & restroom facilities are undersized in the Kitchen, and do not meet ADA accessibility standards. The walk-in cooler & freezer units appear to be under-sized.*
Basement Area	The facility contains a lower basement area below the original building area. This lower basement area is primarily used for storage and utilities. *Concerns:* • *There is evidence of moisture and mold in the basement area. Several areas are mud-slab, with moisture present. Storage items should be removed from this area, and dehumidification should be considered to dry the lower area.*
Life Safety- / Accessibility-Related Equipment	Fire Extinguishers: All fire extinguishers (wall- and cabinet-mounted) appear to meet accessibility requirements as well as applicable NFPA provisions. Signage: Room panel and wayfinding signs appear to generally comply with accessibility requirements. Emergency response exit numbering/identification appears to be adequately posted to the interior and exterior of exits, meeting Safe Schools published recommendations. Drinking Fountains: All of the newer drinking fountains/ electric water coolers appear comply with current accessibility standards. Railings: It appears that most of the railing systems have comply with life safety and accessibility requirements, in terms of handrail and guardrail heights, grip diameters and baluster/guard panel spacing's. Conveying Systems: There are no elevators or mechanical lifts in the building. The accessible egress at the rear of the building is handled by ramps. The basement-level spaces do not necessarily require an elevator, given their current function.

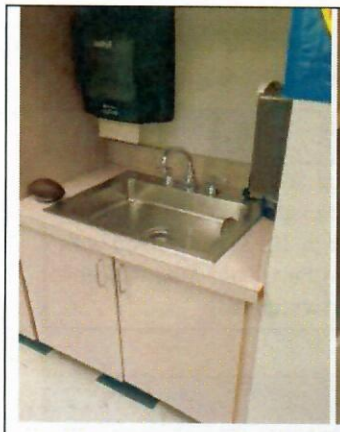
Miscellaneous Equipment & Furnishings:	Athletic Equipment: There are two fixed basketball backstops; all appear to be in good condition. Acoustical Control: There are no acoustical wall panels in the building. Library Furniture: Includes tables, chairs, shelving and related furnishings; all appear to be in good condition. Display Equipment: White marker boards, tack boards and projection screens are prevalent throughout the building, especially within educational spaces. All appear to be in good condition.

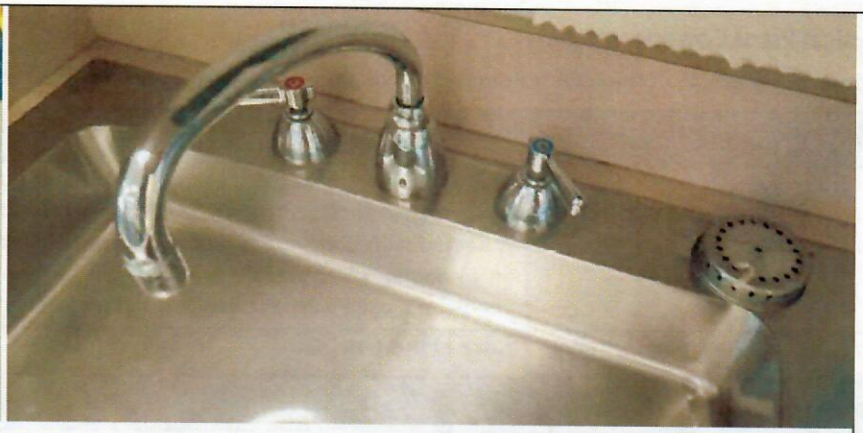
Accessibility & Security Summary / Overview

Additional Accessibility Concerns:	No additional serious problems/issues detected.
Security Issues:	There is no secure entrance vestibule to require visitors to go directly to the school office upon gaining access to the building interior by office staff. Instead, upon being "buzzed" into the building, visitors must walk into the Lobby in order to access the School Office; although there is a vestibule, it stops short of the Office entrance. This main entrance is not ADA accessible.

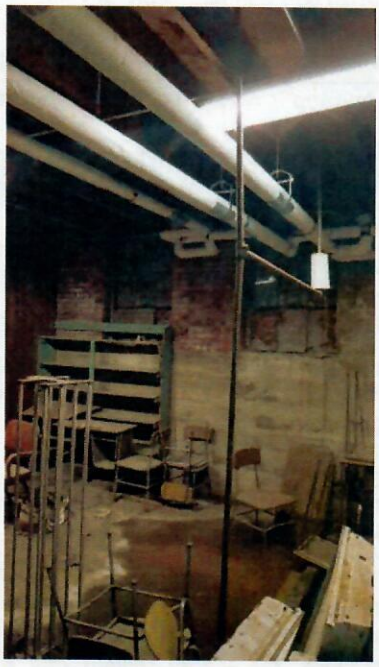


Above: On left, the main entrance is not ADA accessible. In the middle/left, the main entrance for Administration validation is also not ADA accessible. Administration supervision is limited, with access of visitors to the school granted inside the building. Consideration should be given to update the entrances for ADA accessibility as well supervision.





Above: On left, the classroom sink casework does not provide required clearance for front-approach. On the left, the sink controls do not meet ADA requirements for size/shape.



Above: Pictures depict the current condition of the lower basement area. Signs of moisture and mold are present. This area should have storage items removed and a dehumidification system installed.

	RECOMMENDATIONS: • *Install ADA accessible ramp/doors at main entrance(s)* • *Classroom sink cabinets and fixtures should be replaced* • *Renovate main entrance and/or School Office to provide a much more secure entrance to the school.* • *Remove storage items in basement area, and provide dehumidification system.*

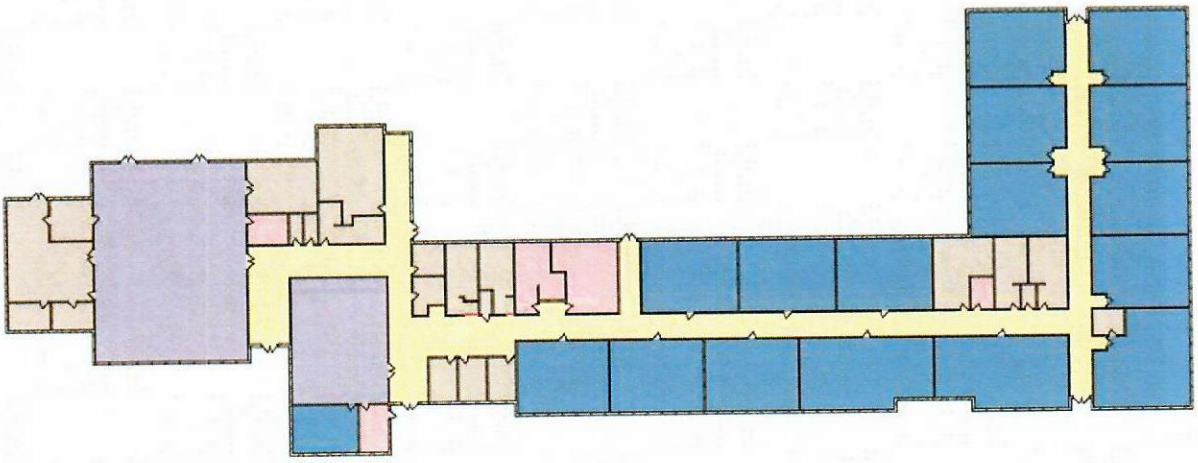
Physical Plant Considerations Below is a "snapshot" of the MEP systems in the condition they were in on the day of our walkthrough.	
HVAC Considerations	
System:	The HVAC system was replaced in 1993, and upgraded as part of a 2010 performance contract to include cooling in educational spaces. The building is heated with cast-iron sectional boilers installed in 1993, and cooled with an air cooled chiller installed in 2010. Classrooms have floor mounted unit ventilators, each with independent hot and chilled water coils.
Recommendations:	*None at this time.*
Plumbing Considerations	
System:	The plumbing systems throughout was replaced as part of the 1993 renovation and is in fair condition. The fixtures are dated with manual flush valves. The water heater is from 1993 and needs to be replaced. No deficiencies were noted regarding the piping.
Recommendations:	*If the building is renovated, replace fixtures. Replace the existing domestic water heater.*
Fire Protection Considerations	
System:	The building is not sprinklered.
Recommendations:	*Provide a new fire suppression system if desired or required by any suggested building improvements.*
Electrical Considerations	
Electrical Distribution System:	The electrical system was last upgraded as part of the 1993 renovation and is in fair shape.
Recommendations:	None at this time.
Lighting Systems:	The interior building lighting consists of mostly T8 fluorescent luminaires. Exterior lighting is Metal Halide.
Recommendations:	*If the building is renovated, replace all lighting with LED. If the building is not renovated, consider replacement of existing interior fluorescent lighting and exterior metal halide with LED type luminaries to ease frequency of maintenance, for energy savings and to meet the requirements of the International Energy Code (IECC). Provide automatic light control to all areas to comply with the International Energy Conservation Code (IECC) and the International Building Code (IBC)*
Program System and Master Clock System:	The building's paging, intercom, clock, phone and data systems were installed as part of the 1993 renovation and are in fair to poor condition.
Recommendations:	If the building is renovated, upgrade existing systems.
Fire Alarm System:	The building has a dated Simplex system that is not consistent with the district's newer Honeywell Notifier systems.
Recommendations:	Upgrade fire alarm system to be a Honeywell Notified system and to meet current codes.

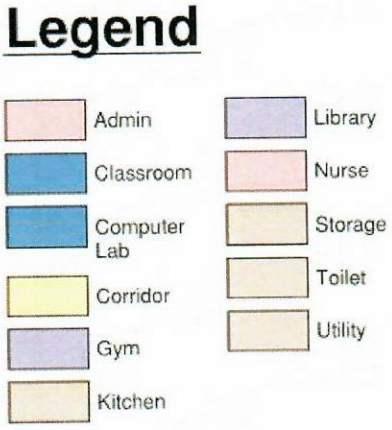
MOUNTAINTOP AREA ELEMENTARY SCHOOL

Overview:

Address:	100 School Drive # 865, Snow Shoe, PA 16874
Construction Timeline:	Built 1962; Additions and/or Renovations 1995
Architectural Area:	± 37,594 SF
Municipalities Served:	Snow Shoe Township
Current Grade Grouping:	Grades K through 5

MOUNTAINTOP AREA ELEMENTARY SCHOOL – EXISTING FLOOR PLANS

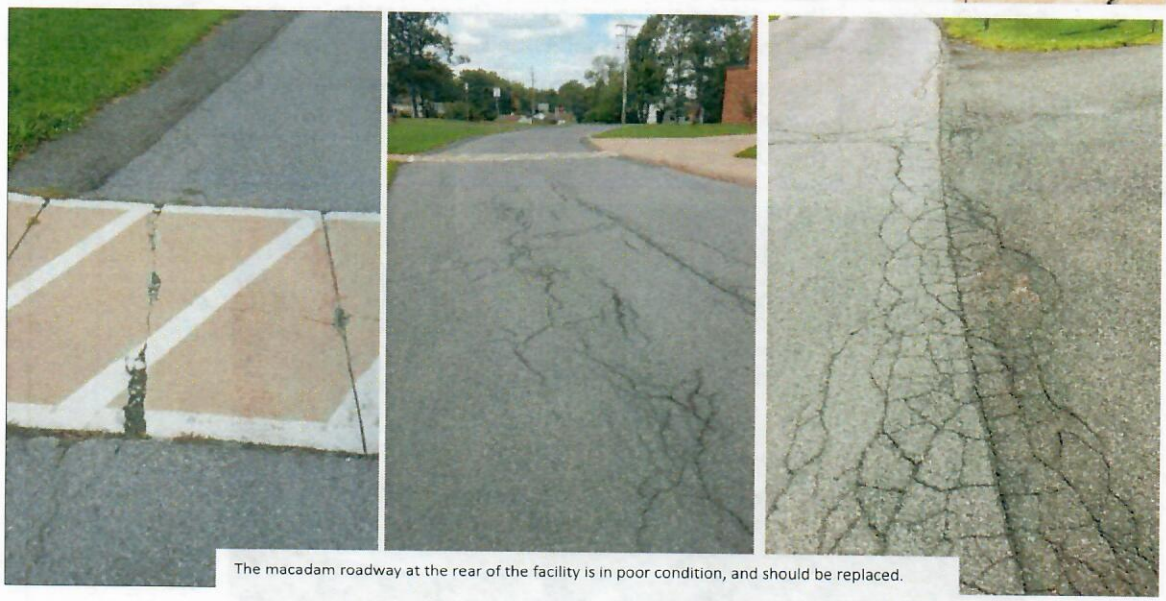




Educational Space Considerations: Educational considerations noted below are based on PDE and general planning / design guidelines.		
Classrooms:		Classrooms are sized appropriately. Visual display equipment, casework and finishes are in good condition in most spaces. Entrances meet code-required egress widths and clearances.
Special Education Classrooms:		Room appears to be adequately sized and equipped. Visual display equipment, casework and finishes are in good condition. Entrance meets code-required egress width and clearances.
Small Group/Reading Room:		Space identified as Reading Room, used for formal or informal instructional and small group functions. Visual display equipment, casework/equipment & finishes are in good condition.
Art/Music Classrooms:		Adequately sized with ample storage space/rooms. Visual display equipment, casework and finishes are in good condition.
Computer Room:		One space; adequately sized. Visual display equipment, casework and finishes are in good condition.
Media Center (Library):		Adequate size, with sufficient support spaces, including office/workroom, A/V storage and story area. Visual display equipment, casework, millwork, library furniture & finishes are in good condition.
Cafetorium:		Appropriate size for dining, physical education, large group meeting and performance activities. Visual display, stage and athletic equipment and finishes are in good condition.
Kitchen:		Adequate size preparation and support spaces. Food service prep and serving equipment and finishes are in good condition.
Administration Area:		Includes School Office, Guidance and Nurse. Size, location and adjacencies to one another and each other is good, although there is no close proximity to the main office. The main office does contain a secured entrance vestibule with check-in. Equipment, casework and finishes are in good condition.
Storage:		Appears to be an adequate amount of general and specific storage rooms/areas, especially in the basement level.
Building Support:		Various mechanical, electrical, custodial and restrooms. The lower basement/crawlspace is unsuitable for use.
Building Codes:	All projects are to be governed under the provisions of the current Pennsylvania Uniform Construction Code (PA-UCC, including applicable International Code Council family of codes), PA Department of Labor & Industry (L&I), Americans with Disabilities Act Accessibility Guidelines (ADAAG) and local municipality amendments and requirements.	

Building Considerations	
Site Conditions	
General Site Information:	The elementary school is located on a ±20-acre site. The school is located in a rural community, surrounded by a small community of single/multi-family housing, businesses, and large-open land.
Topography:	The site is primarily moderate-sloping with mild transitions around the building perimeter, especially at the rear. The main floor of the existing building is fully accessible from the front entrance(s). Overall, depending on the location, size and orientation of any necessary future additions, expansion should be possible, given the existing site size and boundary.
Site Circulation:	Parent and school bus drop off occurs at the front of the building. Large playfields and paved play areas to the north and east.
Site Entrance:	Entrance to the site occurs at Sycamore Street and exiting of the site occurs at 8th Street. Cars and buses both access the site via the south and discharge at the west.
Play Areas:	There is a large playground to the north of the building, located directly behind the school, and contains asphalt-paved play courts with game lines. There is a smaller soft-surface and asphalt play area to the east, with play equipment. There is also a large grass play area to the north east. The surfaces and equipment of the play areas appear to be in good-fair condition, with cracking and spalling macadam.
Storm Water Management:	There does not appear to be any storm water problems.
Parking:	A parking lot is located to the south, at the front of the school. It is accessed from the main School Drive access point. Overall, the asphalt paving parking lot and driveway paving appears to be in fair to good condition, with minor signs of cracking and spalling.
Accessibility, Walkways and Curbing:	The main entrance(s) to the building do meet minimum handicapped accessibility requirements. There are some exterior doorways that require steps down to the driveways at the Multipurpose room and kitchen support areas. Concrete sidewalks, plazas and curbs appear to be in fair to good condition. *Concern: Some of the sidewalks and curbs were previously replaced, although there are some locations that are cracked and spalled.*
Site Amenities:	n/a.
Site Lighting:	n/a.

There are several sections of concrete curbs and sidewalks that should be replaced.

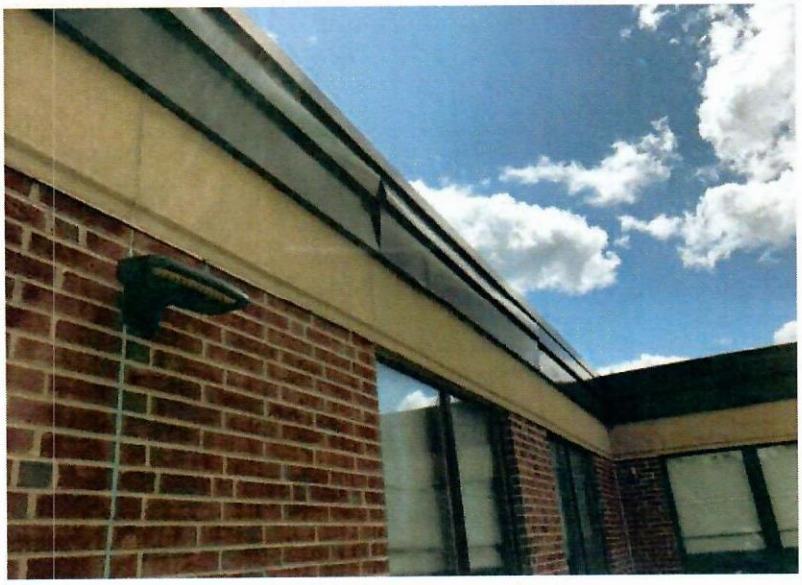


The macadam roadway at the rear of the facility is in poor condition, and should be replaced.

RECOMMENDATIONS:

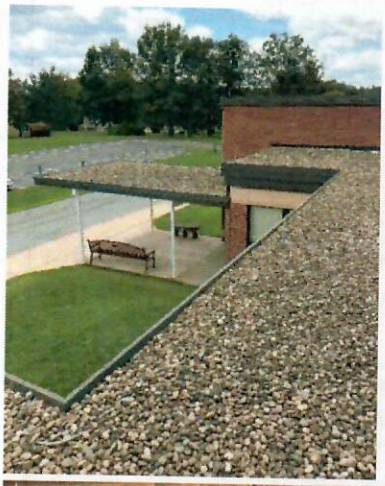
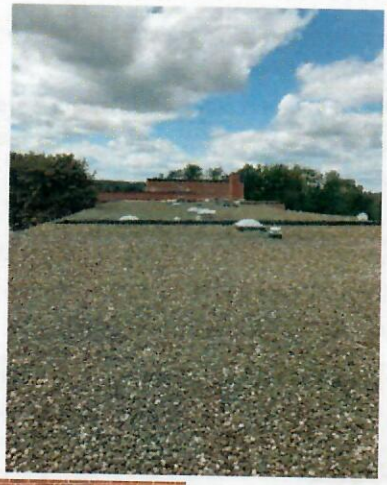
- *Monitor asphalt play areas for wear/damage; sealcoating and restriping/repainting the surfaces may soon be a viable option to help prolong the life of the play area.*
- *Asphalt paving at the rear drive is in poor condition. Several areas were observed with moderate to major cracking, settlement and deterioration. This paved area should be removed and replaced.*
- *Replace damaged sections of concrete curbs and sidewalks where needed.*

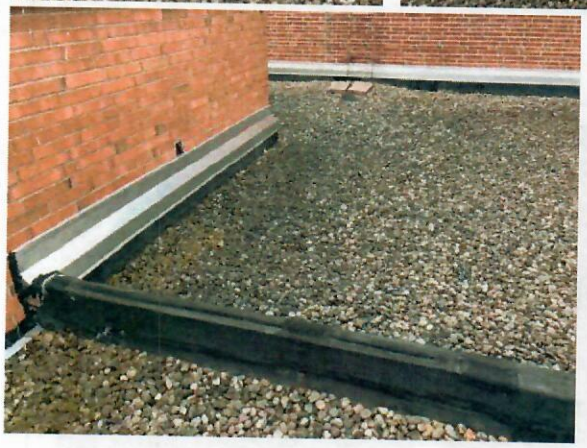
Building Structure	
Structural System:	Primarily a one-story structure; the structural system is steel-framed construction. The roof deck is also steel.
Exterior Envelope - Roof	
Roof System:	The roof is predominantly ballasted, single-ply membrane over rigid insulation and tapered crickets, structurally-sloped to roof drains; the original building and much of the additions slope toward the perimeter, in which the water commonly flows into either scupper drains or gutters and then into downspouts.
Flashing & Trim:	"Flat" roof edges are capped with a metal fascia/gravel stop system; other flashing includes traditional roof-to-wall terminations. The sloped roof portions consist of standard perimeter/edge trims, such as fascia's, flashings, ridge caps and drip edges. Overall, all the flashing/trim is in good condition.
Soffits/Overhangs:	There are various types and conditions of soffits/overhangs. The facility has EIFS frieze boards and soffits, and aluminum trim and fascia. *Concerns: An area of roof trim is loose and damaged. This area should be repaired/maintained*
Roof Skylights/Glazing:	There are no skylights present.



This image depicts the damage at the roof trim fascia. This item should be repaired and maintained.


These pictures depict the current condition of the roofing systems. The ballasted EPDM roof is in good condition. Roof should be monitored for leaks and maintained.

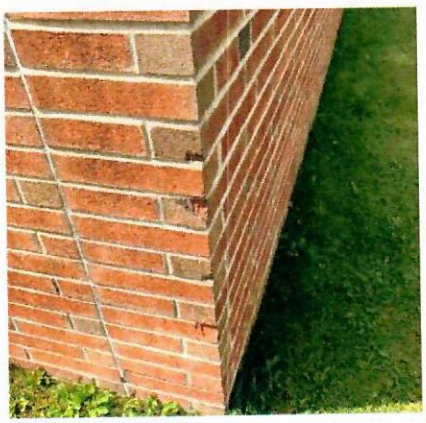



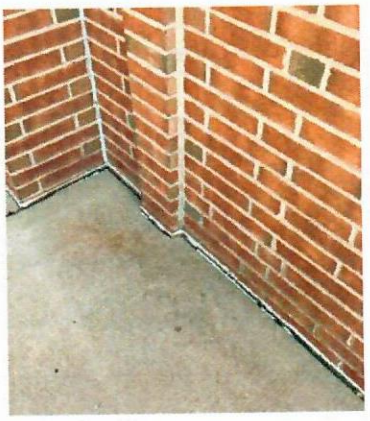



RECOMMENDATIONS:

- *The ballasted roof is in good condition. It should be monitored for leaks and maintained.*
- *Replace the damaged aluminum fascia trim.*

Exterior Envelope - Walls	
Exterior Wall Assemblies:	The exterior walls primarily consist of brick veneer. Brick is in moderate to good condition. *Concerns:* • *Several areas of mortar are loose/missing at the front entrance side of the building.* • *Areas of brick at the rear of the building are damaged and cracked*
Joints/Sealants:	Control joints are dry and delaminating from the masonry. These joints should be removed and replaced. *Concerns:* • *The condition of most sealant joints, including the most recent addition, is poor; the sealant is badly cracking and shrinking.*
Perimeter sealant:	The perimeter building sealant has failed in total. *Concerns:* • *This condition is currently allowing water to penetrate the joint.*
Exterior Doors:	Exterior doors were replaced during the most recent renovation. The condition of the doors is good.
Fenestrations:	Exterior windows were replaced during the most recent renovation. The condition of the windows is good. Windows should be maintained to provide proper functioning and operation.
Exterior Stairs and Ramps:	Exterior stairs and ramps show signs of deterioration and wear. Concrete walls and walkways are cracked and spalled. *Concerns:* • *This condition can result in injury and will continue to degrade. Replacement and repair of damaged surfaces should be considered.*





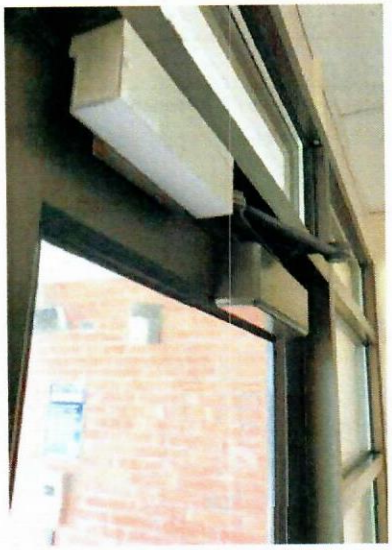
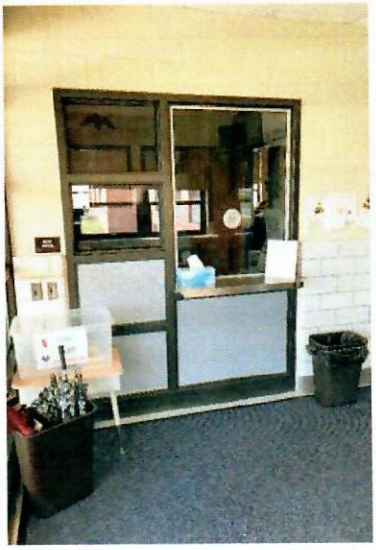
Above: On left, masonry infill has occurred. The sealant/mortar has failed. This area should be addressed to prevent water penetration. In the center, the concrete stairs have been damaged, creating a tripping hazard. These stairs should be repaired. On the right, the perimeter building sealant has failed in total. This condition is currently allowing water to penetrate the joint. The sealant should be removed and replaced at all wall/hard-surface areas, around the entire building.

	RECOMMENDATIONS: • *Consideration should be taken to undergo a thorough masonry cleaning to help preserve the integrity of the exterior wall envelope assemblies.* • *Strip deteriorated joint sealants and install new elastomeric joint sealants of adequate type; continue to monitor other sealant systems for wear.* • *Repoint missing mortar, and reseal all masonry infill areas.* • *Repair/replace damaged concrete ramps and stairs.*
Interior Environment	
Interior Finishes:	Walls: In public/circulation areas, such as Lobbies and Corridors, the wall finishes are primarily painted cmu with structural glazed facing tile wainscot. General classrooms and educational spaces are also painted cmu. The walls in the Administration Offices and Nurse's Suite are primarily painted cmu as well. The walls in the Restrooms have painted cmu with structural glazed facing tile wainscot or ceramic wall tile. The Multipurpose room is also painted cmu. The majority of the wall finishes appear to be in good, well-maintained condition. Floors: The public/circulation areas have asbestos vinyl tile in the main lobby and original corridors. The newer addition (and areas of infill at the original building) are epoxy terrazzo floor finish. The Classrooms in the original building are also asbestos vinyl tile (or carpet over asbestos vinyl tile). Classrooms in the newer addition are primarily carpet, with epoxy terrazzo in the "wet or storage areas." The Media Center, Music Classroom and most of the Administrative Office spaces have carpet, while most of the Nurse's Suite is VCT. The Restrooms have ceramic tile (CT). The Kitchen has quarry tile (QT). Resinous monolithic floor system is in the Multipurpose Room. The floor finishes appear to be in good condition throughout. *Concerns:* *The asbestos flooring should be abated from the facility. Areas of asbestos tiles have become loss and cracked.*

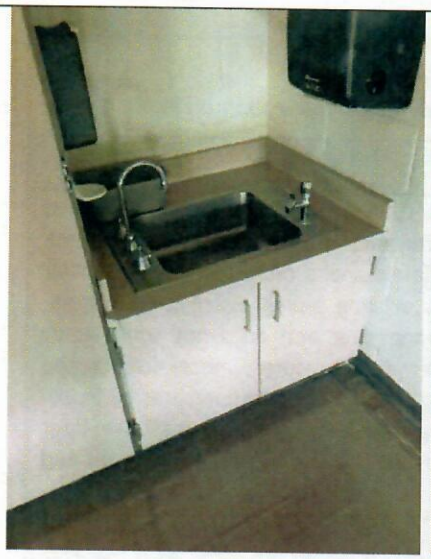
	Ceilings: Suspended acoustical tile ceiling (ACT) systems are the predominant ceiling finish throughout the building, with a variety of finishes and applications. The ceiling in the Kitchen is painted plaster, which is easily cleanable. The public circulation areas also consist of ACT, as does the Media Center, Administrative Offices and some educational spaces. The Multipurpose Room has exposed ceilings. No major ceiling deficiencies were detected.
	RECOMMENDATIONS: • *Overall, interior finishes appear to be in sound condition and are well-maintained. Maintain existing finishes; repair/replaced finishes as needed under maintenance budget.* • *Asbestos containing materials should be abated from the facility.*
Interior Doors:	Wood Doors in Hollow Metal Frames: Most common type, including Classrooms and Administrative Offices. FRP Doors, Hollow Metal Frames: Most common in utilitarian applications. Aluminum Entrances: At main entrance, exterior locations. *Concerns:* • *Overall, door assemblies appear to be in good, sound condition.*
Fire-Rated Openings:	Fire-rated door assemblies exist at fire-rated separations as required by code, which appear to comply.
Accessibility:	It appears that most current accessibility requirements are met, especially where additions and renovations took place. This includes classroom door widths, side clearances, side/frontal approaches, swing direction and glazed opening and hardware locations. *Concern: The exterior doors from the Multipurpose room and Kitchen areas are not ADA accessible. Stairs are currently the only means of entrance.*
Door Hardware:	Locksets consist of lever handles, which comply with current accessibility requirements. Egress doors consist of panic device hardware and closers. Fire-rated assemblies consist of latching hardware, closers and magnetic hold-open devices at certain locations.
Toilet Rooms:	Large Restrooms: The group toilet room appear to be fully-accessible and have quality finishes. Stall partitions are aluminum and are in good condition, as are plumbing fixtures. The restrooms appear to have adequate accessories. Single-Occupant Restrooms: The single-occupant restrooms are not ADA accessible; restrooms were upgraded with new finishes, fixtures and accessories, but not in terms of accessibility. *Concerns:* • *Current accessibility standards require vertical grab bars in handicapped toilet facilities, which do not currently exist in this building.* • *Group Toilets and Single-use staff and student toilets do not meet current ADA accessibility standards*

Building Service Areas:	There is a dedicated receiving area with an elevated loading dock next to the Kitchen, which is where most deliveries occur for food service and general items. Dumpsters are located adjacent to this entrance on a concrete pad. It appears that the area adequately accommodates delivery trucks and parking.
Equipment and Furnishings	
Casework and Millwork:	The educational and faculty spaces consist of plastic laminate cabinets, countertops and backsplashes. Open plastic laminated shelving line the exterior walls on either side of the unit ventilators. Custom millwork is present at the Media Center circulation desk and Main Office receptionist's desk. Overall, these components appear to be in good condition. *Concerns:* • *The sink base cabinets do not contain open knee space that is required by accessibility provisions; additionally, not all countertop and wall cabinet mounting heights comply.*
Food Service Equipment:	Kitchen equipment appears to meet all health and sanitation codes. *Concerns: The locker & restroom facilities are undersized in the Kitchen, and do not meet ADA accessibility standards. The walk-in cooler & freezer units appear to be under-sized.*
	•
Life Safety- / Accessibility-Related Equipment	Fire Extinguishers: All fire extinguishers (wall- and cabinet-mounted) appear to meet accessibility requirements as well as applicable NFPA provisions. Signage: Room panel and wayfinding signs appear to generally comply with accessibility requirements. Emergency response exit numbering/identification appears to be adequately posted to the interior and exterior of exits, meeting Safe Schools published recommendations. Drinking Fountains: All of the newer drinking fountains/ electric water coolers appear comply with current accessibility standards. Railings: It appears that most of the railing systems have comply with life safety and accessibility requirements, in terms of handrail and guardrail heights, grip diameters and baluster/guard panel spacing's. Conveying Systems: There are no elevators or mechanical lifts in the building. The accessible egress at the rear of the building is handled by ramps.

Miscellaneous Equipment & Furnishings:	Athletic Equipment: There are six fixed basketball backstops; all appear to be in good condition. Acoustical Control: There are no acoustical wall panels in the building. Library Furniture: Includes tables, chairs, shelving and related furnishings; all appear to be in good condition. Display Equipment: White marker boards, tack boards and projection screens are prevalent throughout the building, especially within educational spaces. All appear to be in good condition.
Accessibility & Security Summary / Overview	
Additional Accessibility Concerns:	No additional serious problems/issues detected.
Security Issues:	A secured entrance vestibule is provided to require visitors to check in prior to gaining access to the school. The main administration area can therefore control visitors prior to gaining access to the building interior. .


Above: On left, the main entrance is secured with a magnetic closure. In the middle, the main entrance for Administration validation is provided in the vestibule. Egress from the secured door is also provided.



Above: On left, the classroom sink casework does not provide required clearance for front-approach. On the right, the Faculty sink assemblies do not meet ADA requirements.

RECOMMENDATIONS:

- *Classroom and Faculty sink cabinets and fixtures should be replaced.*

Physical Plant Considerations Below is a "snapshot" of the MEP systems in the condition they were in on the day of our walkthrough.	
HVAC Considerations	
System:	The HVAC system was fully replaced in 1995. In 2007 the central plant was upgraded as part of a performance contract to be a geothermal system. This included the installation of a wellfield and a multi-stack boiler/chiller unit that connected to the building's existing piping distribution system. The boiler/chiller requires manual changeover and does not consistently start in the winter with low water temperatures, necessitating the continued use of an inefficient oil fired boiler. Loop temperatures go below freezing, decreasing system operating efficiency. Classrooms have floor mounted unit ventilators from 1995 as well as the library, gymnasium and teachers work room HVAC systems.
Recommendations:	*Replace all terminal equipment that was not replaced during the 2007 performance contract. This would include unit ventilators and air handling units. Consider upgrading to a full 4-pipe system that allows for simultaneous cooling and heating. Replace the existing oil fired boiler with a new boiler. Replace existing FCUs that are currently undersized. Rework relief air systems so that egress corridors are not used as a relief air plenum.*
Plumbing Considerations	
System:	The plumbing system throughout was replaced in the 1995 renovation and is in fair condition. The water heater was replaced in 2008 and is in good condition. Fixtures are aging and do not comply with current ADA standards.
Recommendations:	*No specific problems were noted, but if the building is renovated the plumbing system should be replaced throughout, including all sanitary and vent piping.*
Fire Protection Considerations	
System:	The building is not sprinklered.
Recommendations:	*Provide a new fire suppression system if desired or required by any suggested building improvements.*
Electrical Considerations	
Electrical Distribution System:	The electrical system was upgraded as part of the 1995 renovation, and the emergency generator was replaced in 2010.
Recommendations:	None at this time.
Lighting Systems:	The interior building lighting consists of mostly T8 fluorescent luminaires. Exterior lighting is Metal Halide.
Recommendations:	*If the building is renovated, replace all lighting with LED. If the building is not renovated, consider replacement of existing interior fluorescent lighting and exterior metal halide with LED type luminaries to ease frequency of maintenance, for energy savings and to meet the requirements of the International Energy Code (IECC). Provide automatic light control to all areas to comply with the International Energy Conservation Code (IECC) and the International Building Code (IBC)*

Program System and Master Clock System:	The building's paging, intercom, clock, phone and data systems were installed as part of the 1995 renovation and are in fair to poor condition.
Recommendations:	If the building is renovated, upgrade existing systems.
Fire Alarm System:	The building has a dated Simplex system that is not consistent with the district's newer Honeywell Notifier systems.
Recommendations:	Upgrade fire alarm system to be a Honeywell Notified system and to meet current codes.

THIS PAGE IS INTENTIONALLY LEFT BLANK

BALD EAGLE AREA SCHOOL DISTRICT
District Wide Feasibility Study

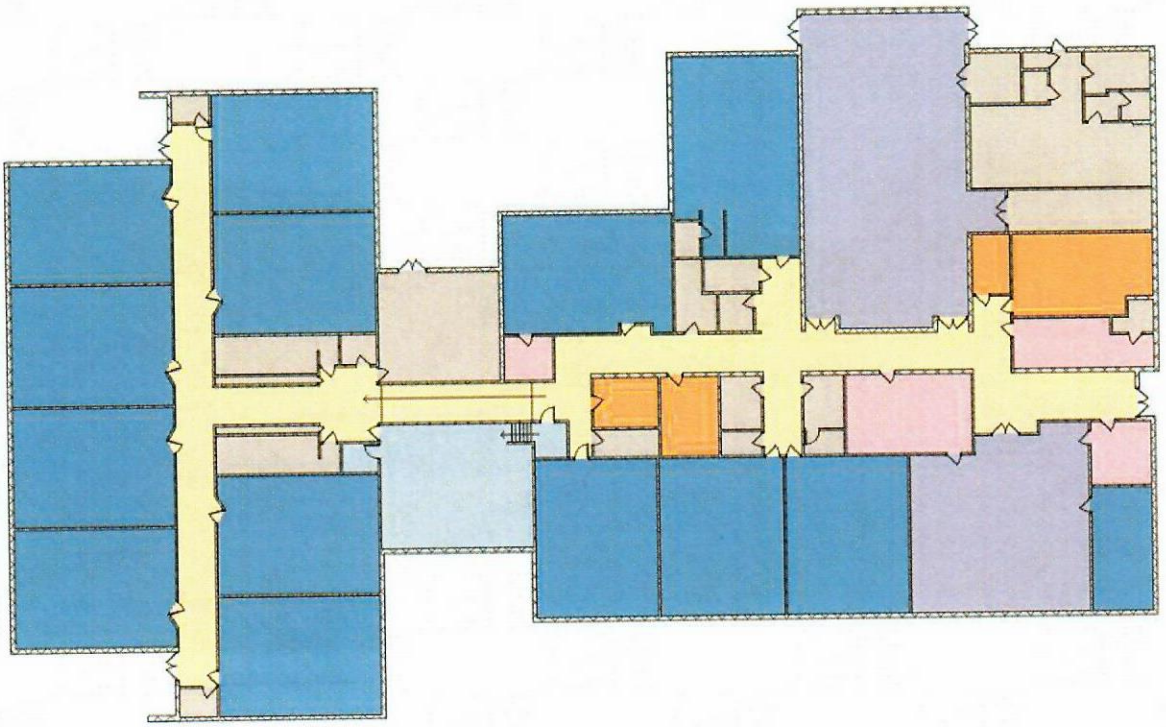
PORT MATILDA ELEMENTARY SCHOOL

Overview:

Address:	209 Locust St, Port Matilda, PA 16870
Construction Timeline:	Built 1965; Additions and/or Renovations 1971, 1998
Architectural Area:	± 27,945 SF
Municipalities Served:	Port Matilda Township
Current Grade Grouping:	Grades K through 5

BALD EAGLE AREA SCHOOL DISTRICT
District Wide Feasibility Study

PORT MATILDA ELEMENTARY SCHOOL – EXISTING FLOOR PLANS



Legend

- Admin
- Art
- Classroom
- Computer Lab
- Corridor
- Gym
- Kindergarten
- Kitchen
- Library
- Locker
- Music
- Nurse
- SGI
- Special Ed.
- Storage
- Toilet
- Utility

Educational Space Considerations:		
Educational considerations noted below are based on PDE and general planning / design guidelines.		
Classrooms:		Classrooms are sized appropriately. Visual display equipment, casework and finishes are in good condition in most spaces. Entrances meet code-required egress widths and clearances.
Special Education Classrooms:		Room appears to be adequately sized and equipped. Visual display equipment, casework and finishes are in good condition. Entrance meets code-required egress width and clearances.
Small Group:		Used for formal or informal instructional and small group functions. Visual display equipment, casework/equipment & finishes are in good condition.
Art/Music Classrooms:		Adequately sized with ample storage space/rooms. Visual display equipment, casework and finishes are in good condition.
Computer Room:		One space; inadequately sized. Visual display equipment, casework and finishes are in good condition.
Media Center (Library):		Adequate size, with sufficient support spaces, including office/workroom, A/V storage and story area. Visual display equipment, casework, millwork, library furniture & finishes are in good condition.
Cafetorium:		Appropriate size for dining, physical education, large group meeting and performance activities. Visual display, stage and athletic equipment and finishes are in good condition.
Kitchen:		Adequate size preparation and support spaces. Food service prep and serving equipment and finishes are in good condition.
Administration Area:		Includes School Office, Guidance and Nurse. Size, location and adjacencies to one another and each other is good, although there is no close proximity to the main office. The main office does not contain a secured entrance vestibule with check-in. Equipment, casework and finishes are in good condition.
Storage:		Appears to be an adequate amount of general and specific storage rooms/areas, especially in the basement level.
Building Support:		Various mechanical, electrical, custodial and restrooms. The lower basement/crawlspace is unsuitable for use.
Building Codes:	All projects are to be governed under the provisions of the current Pennsylvania Uniform Construction Code (PA-UCC, including applicable International Code Council family of codes), PA Department of Labor & Industry (L&I), Americans with Disabilities Act Accessibility Guidelines (ADAAG) and local municipality amendments and requirements.	

Building Considerations	
Site Conditions	
General Site Information:	The elementary school is located on a ±5-acre site. The school is located in a dense community, surrounded by a small neighborhood of single/multi-family housing, businesses, and large-open land.
Topography:	The site is primarily moderate-sloping with mild transitions around the building perimeter, especially at the rear. The main floor of the existing building is fully accessible from the front entrance. Overall, depending on the location, size and orientation of any necessary future additions, expansion may be a challenge, given the existing site size and boundary.
Site Circulation:	Parent and school bus drop off occurs at the front of the building. Moderately sized, paved play areas are located to the north west.
Site Entrance:	Entrance to the site occurs at Locust Street at the front of the building. A rear parking lot for staff is located off of Prospect Street. Cars and buses both access the site via Locust Street.
Play Areas:	There is a large playground to the northwest of the building, located directly behind the school, and contains asphalt-paved play courts with game lines. There are also large ballfields/grass play area to the south east. The surfaces and equipment of the play areas appear to be in good-fair condition, with cracking and spalling macadam.
Storm Water Management:	There does not appear to be any storm water problems.
Parking:	A parking lot is located to the north, at the rear of the school. It is accessed from Prospect Street. Overall, the asphalt paving parking lot and driveway paving appears to be in fair to good condition, with minor signs of cracking and spalling.
Accessibility, Walkways and Curbing:	The main entrance(s) to the building does meet minimum handicapped accessibility requirements. There are some exterior doorways that require steps down to the walkways at the Multipurpose room and rear classroom exit lobby. The Mechanical room also does not provide for ADA accessibility. Concrete sidewalks, plazas and curbs appear to be in fair to good condition. *Concern: Some of the sidewalks and curbs were previously replaced, although there are some locations that are cracked and spalled.*
Site Amenities:	n/a.
Site Lighting:	n/a.

The macadam roadway at the rear of the facility is in poor condition, and should be replaced.

RECOMMENDATIONS:

- *Monitor asphalt play areas for wear/damage; sealcoating and restriping/repainting the surfaces may soon be a viable option to help prolong the life of the play area. Larger cracked areas should be remediated.*
- *Asphalt paving at the rear drive is in poor condition. Several areas were observed with moderate to major cracking, settlement and deterioration. This paved area should be removed and replaced.*

	• *Replace missing control joints and sealant at paved areas.*
Building Structure	
Structural System:	Primarily a one-story structure; the structural system is steel-framed construction. The roof deck is also steel.
Exterior Envelope - Roof	
Roof System:	The roof is predominantly single-ply membrane over rigid insulation and tapered crickets, structurally-sloped to roof drains; the original building and much of the additions slope toward the perimeter, in which the water commonly flows into either scupper drains or gutters and then into downspouts.
Flashing & Trim:	"Flat" roof edges are capped with a metal fascia/gravel stop system; other flashing includes traditional roof-to-wall terminations. The sloped roof portions consist of standard perimeter/edge trims, such as fascia's, flashings, ridge caps and drip edges. Overall, all the flashing/trim is in good condition.
Soffits/Overhangs:	There are various types and conditions of soffits/overhangs. The facility has aluminum roof trim and wall fascia. Painted wood soffits are present at window heads. Painted plaster soffit is present at entrances and overhangs. *Concerns: The painted wood soffits above windows is degrading and chipping. These soffits should be addressed before the integrity of the material is lost.*
Roof Skylights/Glazing:	There are no skylights present.

This image depicts the damage at the window head soffit trim. This item should be repaired and maintained. Plaster soffits should be repaired and repainted at patched areas.





These pictures depict the current condition of the roofing systems. The coated EPDM roof is in fair condition. Roof should be monitored for leaks and maintained.

	RECOMMENDATIONS: • *The coated EPDM roof is in good-fair condition. It should be monitored for leaks and maintained.* • *Repair wood soffits at window heads.*

Exterior Envelope - Walls	
Exterior Wall Assemblies:	The exterior walls primarily consist of brick veneer. Brick is in moderate to good condition. *Concerns:.* • *Areas of brick at the rear of the building are damaged, cracked and missing*
Joints/Sealants:	Sealant at window frames is failing. *Concerns:* • *The condition of most sealant joints, is poor. Tthe sealant is badly cracking and shrinking, and allowing water to penetrate the joint*
Perimeter sealant:	The perimeter building sealant has failed in total. *Concerns:* • *This condition is currently allowing water to penetrate the joint.*
Exterior Doors:	Exterior doors were replaced during the most recent renovation. The condition of the doors is good.
Fenestrations:	Exterior windows were replaced during the most recent renovation. The condition of the windows are good. Sealant at window frames is beginning to fail. Sealant should be replaced. Windows should be maintained to provide proper functioning and operation.
Exterior Stairs and Ramps:	Exterior stairs and dock show signs of deterioration and wear. Concrete walls and walkways are cracked and spalled. *Concerns:* • *This condition can result in injury and will continue to degrade. Replacement and repair of damaged surfaces should be considered.*

Above: The brick is damaged, cracked and missing at these areas. This area should be addressed to prevent water penetration and settlement.

Above: The sealant has failed at the window frames. This area should be addressed to prevent water penetration and leaks.

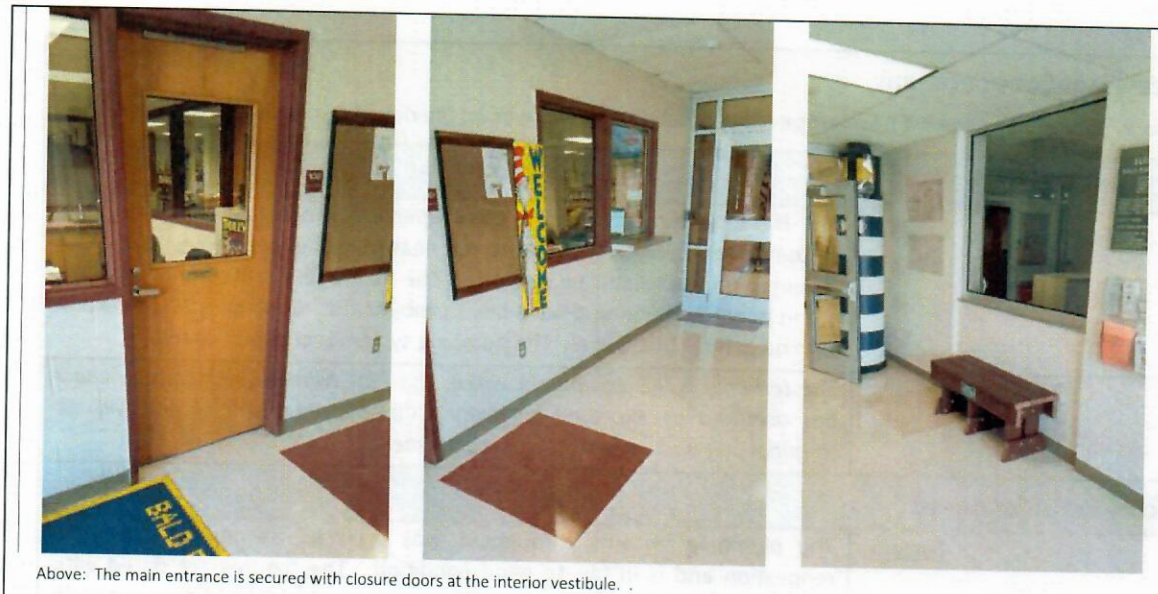
Above: The concrete stairs and dock area is damaged and in disrepair. This area should be addressed to prevent further deterioration and injury.

	RECOMMENDATIONS: • *Consideration should be taken to undergo a thorough masonry cleaning to help preserve the integrity of the exterior wall envelope assemblies.* • *Strip deteriorated joint sealants and install new elastomeric joint sealants of adequate type; continue to monitor other sealant systems for wear.* • *Repoint missing mortar, and reseal all masonry infill areas.* • *Repair/replace damaged concrete dock and stairs.*

Interior Environment	
Interior Finishes:	Walls: In public/circulation areas, such as Lobbies and Corridors, the wall finishes are primarily painted cmu and/or painted plaster with structural glazed facing tile wainscot. General classrooms and educational spaces are also painted plaster or cmu. The walls in the Administration Offices and Nurse's Suite are primarily painted plaster as well. The walls in the Restrooms have painted plaster and/or cmu with ceramic wall tile. The Multipurpose room is also painted cmu. The majority of the wall finishes appear to be in good, well-maintained condition. Floors: The public/circulation areas have terrazzo in the main lobby and original corridors. The newer addition (and areas of infill at the original building) are vinyl tile floor finish. The Classrooms in the original building and new additions are are primarily carpet, with vinyl tile in the "wet or storage areas." The Media Center, Music Classroom and most of the Administrative Office spaces have carpet, while most of the Nurse's Suite is VCT. The larger group Restrooms have ceramic tile (CT) or terrazzo floor finishes, while the single use toilets have VCT. The Kitchen has quarry tile (QT). Resinous monolithic floor system is in the Multipurpose Room. The floor finishes appear to be in good condition throughout. Ceilings: Suspended acoustical tile ceiling (ACT) systems are the predominant ceiling finish throughout the building, with a variety of finishes and applications. The ceiling in the Kitchen is painted plaster, which is easily cleanable. The public circulation areas also consist of ACT, as does the Media Center, Administrative Offices and some educational spaces. The Multipurpose Room has suspended acoustical tile ceiling. No major ceiling deficiencies were detected.
	RECOMMENDATIONS: • *Overall, interior finishes appear to be in sound condition and are well-maintained. Maintain existing finishes; repair/replaced finishes as needed under maintenance budget.*
Interior Doors:	Wood Doors in Hollow Metal Frames: Most common type, including Classrooms and Administrative Offices. FRP Doors, Hollow Metal Frames: Most common in utilitarian applications. Aluminum Entrances: At main entrance, exterior locations. *Concerns:* • *Overall, door assemblies appear to be in good, sound condition.*
Fire-Rated Openings:	n/a

Accessibility:	It appears that most current accessibility requirements are met, especially where additions and renovations took place. This includes classroom door widths, side clearances, side/frontal approaches, swing direction and glazed opening and hardware locations. *Concerns:* • The entrance door to Classroom 125 does not meet current ADA accessibility standards. • *The exterior doors from the Maintenance room and Classrooms 134/136 areas are not ADA accessible.* *Note: The doors in SGI147 and 149 are not permitted by PDE code. These instructional doors must be out-swinging doors.*
Door Hardware:	Locksets consist of lever handles, which comply with current accessibility requirements. Egress doors consist of panic device hardware and closers. Fire-rated assemblies consist of latching hardware, closers and magnetic hold-open devices at certain locations.
Toilet Rooms:	Large Restrooms: The group toilet rooms adjacent to the Multipurpose room appear to be fully-accessible and have quality finishes. Stall partitions are aluminum and are in good condition, as are plumbing fixtures. The restrooms appear to have adequate accessories. The group toilet rooms at the lower classroom level do not meet current ADA accessibility standards. Single-Occupant Restrooms: The single-occupant restrooms are not ADA accessible; restrooms were upgraded with new finishes, fixtures and accessories, but not in terms of accessibility. *Concerns:* • *Current accessibility standards require vertical grab bars in handicapped toilet facilities, which do not currently exist in this building.* • *Group Toilets and Single-use staff and student toilets do not meet current ADA accessibility standards.*
Building Service Areas:	There is a dedicated receiving area with an elevated loading dock next to the Kitchen, which is where most deliveries occur for food service and general items. Dumpsters are located adjacent to this entrance on a concrete pad. It appears that the area adequately accommodates delivery trucks and parking.
Equipment and Furnishings	
Casework and Millwork:	The educational and faculty spaces consist of plastic laminate cabinets, countertops and backsplashes. Open plastic laminated shelving line the exterior walls on either side of the unit ventilators. Custom millwork is present at the Media Center circulation desk and Main Office receptionist's desk. Overall, these components appear to be in good condition. *Concerns:* • *The sink base cabinets do not contain open knee space that is required by accessibility provisions; additionally, not all countertop and wall cabinet mounting heights comply.*

Food Service Equipment:	Kitchen equipment appears to meet all health and sanitation codes. *Concerns: The locker & restroom facilities are undersized in the Kitchen, and do not meet ADA accessibility standards. The walk-in cooler & freezer units appear to be under-sized.*
	•
Life Safety- / Accessibility-Related Equipment	Fire Extinguishers: All fire extinguishers (wall- and cabinet-mounted) appear to meet accessibility requirements as well as applicable NFPA provisions. Signage: Room panel and wayfinding signs appear to generally comply with accessibility requirements. Emergency response exit numbering/identification appears to be adequately posted to the interior and exterior of exits, meeting Safe Schools published recommendations. Drinking Fountains: All of the newer drinking fountains/ electric water coolers appear comply with current accessibility standards. Railings: The railings at the interior ramp do no meet ADA requirements. The railing should be replaced / extended to provide proper offset at the top/bottom of the ramp. Conveying Systems: There are no elevators or mechanical lifts in the building. The accessible egress at the rear of the building is handled by ramps.
Miscellaneous Equipment & Furnishings:	Athletic Equipment: There are six fixed basketball backstops; all appear to be in good condition. Acoustical Control: There are no acoustical wall panels in the building. Library Furniture: Includes tables, chairs, shelving and related furnishings; all appear to be in good condition. Display Equipment: White marker boards, tack boards and projection screens are prevalent throughout the building, especially within educational spaces. All appear to be in good condition.
Accessibility & Security Summary / Overview	
Additional Accessibility Concerns:	• No additional serious problems/issues detected.
Security Issues:	• A secured entrance vestibule is provided, requiring visitors to check in prior to gaining access to the school. The main administration area can control visitors prior to gaining access to the building interior. .



Above: The main entrance is secured with closure doors at the interior vestibule. .

Above: On left, the classroom sink casework does not provide required clearance for front-approach. In the middle, the handrail extension at the ramp does not meet standards for the 12" offset. On the right, the Classroom doorway does not meet ADA requirements.

RECOMMENDATIONS:

- *Classroom and Faculty sink cabinets and fixtures should be replaced.*
- *The handrails should be modified to meet the ADA requirements*
- *The Classroom door should be replaced with a unit to provide proper swing/clearance*
- *The SGI doors should be replaced with units to provide proper out-swing.*

Physical Plant Considerations Below is a "snapshot" of the MEP systems in the condition they were in on the day of our walkthrough.	
HVAC Considerations	
System:	The HVAC system received a comprehensive renovation in 1998. The system is geothermal, with horizontal heat pumps above ceilings and floor mounted unit ventilator heat pumps. The heat pump refrigeration systems are in poor condition and have been problematic. Controls are standalone with no central DDC panel. The pumping system is constant speed.
Recommendations:	*The terminal HVAC equipment within the Port Matilda Elementary School has achieved its expected longevity. Consideration should be given to terminal unit and control system replacement.*
Plumbing Considerations	
System:	The plumbing systems throughout was replaced as part of the 1999 renovation and is in fair to good condition. The fixtures are dated with manual flush valves. The thermostatic mixing valve is old and does not work properly. The water heater is new but the recirculation pump needs to be replaced. The water softener was recently rebuilt. No deficiencies were noted regarding the piping.
Recommendations:	*If the building is renovated, replace fixtures. Consider replacement of the recirculation pump and the thermostatic mixing valve.*
Fire Protection Considerations	
System:	The building is not sprinklered.
Recommendations:	*Provide a new fire suppression system if desired or required by any suggested building improvements.*
Electrical Considerations	
Electrical Distribution System:	The normal/emergency power systems were installed as part of the 1998 renovation and are in fair shape..
Recommendations:	Upgrade panels and emergency generator if the building is renovated.
Lighting Systems:	The interior building lighting consists of mostly T8 fluorescent luminaires with exterior LED wall packs..
Recommendations:	*If the building is renovated, replace all lighting with LED. If the building is not renovated, consider replacement of existing interior fluorescent lighting and exterior metal halide with LED type luminaries to ease frequency of maintenance, for energy savings and to meet the requirements of the International Energy Code (IECC). Provide automatic light control to all areas to comply with the International Energy Conservation Code (IECC) and the International Building Code (IBC)*

Program System and Master Clock System:	The building's paging, intercom, clock, phone and data systems were installed as part of the 1998 renovation and are in fair to poor condition.
Recommendations:	If the building is renovated, upgrade existing systems.
Fire Alarm System:	The building has a dated Simplex system that is not consistent with the district's newer Honeywell Notifier systems.
Recommendations:	Upgrade fire alarm system to be a Honeywell Notified system and to meet current codes.

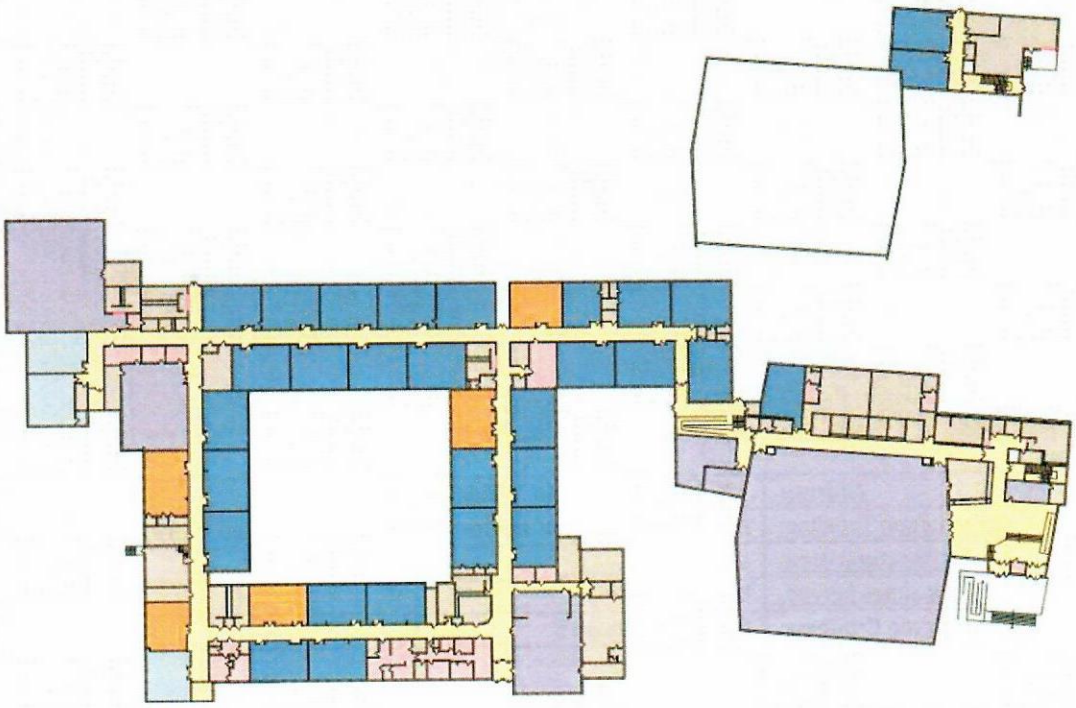
THIS PAGE IS INTENTIONALLY LEFT BLANK

WINGATE ELEMENTARY SCHOOL

Overview:

Address:	776 S Eagle Valley Rd, Wingate, PA 16823
Construction Timeline:	Built 1953; Additions and/or Renovations 1962, 1967, 1990
Architectural Area:	± 93,800 SF
Municipalities Served:	Boggs Township
Current Grade Grouping:	Grades K through 5

WINGATE ELEMENTARY SCHOOL – EXISTING FLOOR PLANS



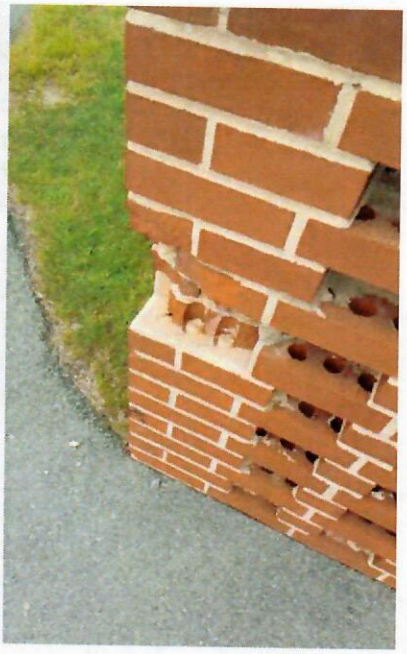
Legend

Admin	Computer Lab	Library	Stairs
Art	Corridor	Music	Storage
Auditorium	Gym	Nurse	Toilet
Cafeteria	Kindergarten	SGI	Utility
Classroom	Kitchen	Special Ed.	Vestibule

Educational Space Considerations: Educational considerations noted below are based on PDE and general planning / design guidelines.		
Classrooms:		Classrooms are sized appropriately. Visual display equipment, casework and finishes are in good condition in most spaces. Entrances meet code-required egress widths and clearances.
Special Education Classrooms:		Rooms appear to be adequately sized and equipped. Visual display equipment, casework and finishes are in good condition. Entrance meets code-required egress width and clearances.
Small Group:		Used for formal or informal instructional and small group functions. Visual display equipment, casework/equipment & finishes are in good condition.
Art/Music Classrooms:		Adequately sized with ample storage space/rooms. Visual display equipment, casework and finishes are in good condition.
Computer Room:		Two Spaces; Visual display equipment, casework and finishes are in good condition.
Media Center (Library):		Appears to be adequate size, with sufficient support spaces, including office/workroom, A/V storage and story area. Visual display equipment, casework, millwork, library furniture & finishes are in good condition.
Cafetorium:		Appears to be undersized for dining, physical education, and large group meeting and performance activities. Visual display, stage and athletic equipment and finishes are in good condition.
Kitchen:		Appears to be undersized for preparation and support spaces. Food service prep and serving equipment and finishes are in good condition.
Administration Area:		Includes School Office, Guidance and Nurse. Size, location and adjacencies to one another and each other is good. The main office does contain a secured entrance vestibule with check-in. Equipment, casework and finishes are in good condition.
Storage:		Appears to be an adequate amount of general and specific storage rooms/areas, especially in the basement level.
Building Support:		Various mechanical, electrical, custodial and restrooms.
Building Codes:	All projects are to be governed under the provisions of the current Pennsylvania Uniform Construction Code (PA-UCC, including applicable International Code Council family of codes), PA Department of Labor & Industry (L&I), Americans with Disabilities Act Accessibility Guidelines (ADAAG) and local municipality amendments and requirements.	

Building Considerations	
Site Conditions	
General Site Information:	The elementary school is located on a ±214-acre site. The school is located in a dense community, surrounded by fields, forest, residential areas and industrial buildings.
Topography:	The site is primarily moderate-sloping with mild transitions around the building perimeter, especially at the rear. The main floor of the existing building is fully accessible from the front entrance.
Site Circulation:	Parent and school bus drop off occurs at the front of the building. Moderately sized, play area is located to the north west and West of the building.
Site Entrance:	Entrance to the site occurs at S Eagle Valley Rd at the front of the building. Cars and buses both access the site via S Eagle Valley Rd.
Play Areas:	There is a playground to the northwest of the building, located directly behind the school, and contains large ballfields/grass play area. The surfaces and equipment of the play areas appear to be in good-fair condition. The paved area is to the west of the building.
Storm Water Management:	There does not appear to be any storm water problems.
Parking:	A parking lot is located to the South and West, at the front of the school. It is accessed from S Eagle Valley Rd. Overall, the asphalt paving parking lot and driveway paving appears to be in fair to good condition, with minor signs of cracking and spalling.
Accessibility, Walkways and Curbing:	The main entrance(s) to the building does meet minimum handicapped accessibility requirements. The Mechanical room also does not provide for ADA accessibility.
Site Amenities:	n/a.
Site Lighting:	Site lighting is present around the parking lot

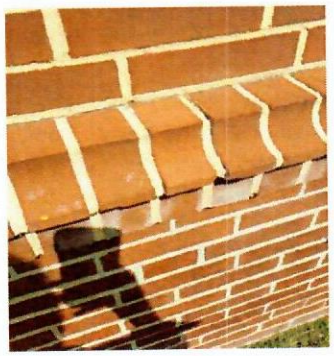


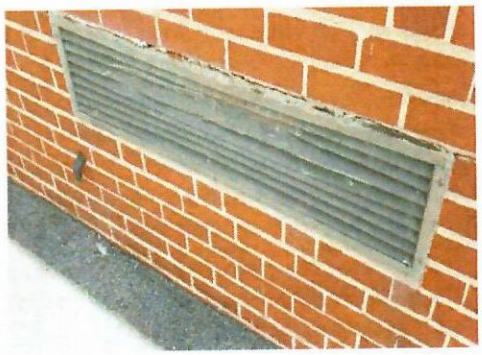


	RECOMMENDATIONS: • *Fix concrete spalling at front door* • *Repair concrete spalling at exterior staircase* • *Replace missing bricks and mortar at exterior half wall*
Building Structure	
Structural System:	Primarily a one-story structure; the structural system is load bearing masonry construction. The roof deck is a steel structure.
Exterior Envelope - Roof	
Roof System:	The roof is predominantly single-ply membrane over rigid insulation and tapered crickets, structurally-sloped to roof drains; the original building and much of the additions slope toward the center, in which the water commonly flows into roof drains.
Flashing & Trim:	"Flat" roof edges are capped with a metal fascia/gravel stop system; other flashing includes traditional roof-to-wall terminations. The sloped roof portions consist of standard perimeter/edge trims, such as fascia's, flashings, ridge caps and drip edges. Overall, all the flashing/trim is in good condition just some missing segments.
Soffits/Overhangs:	There are various types and conditions of soffits/overhangs. The facility has aluminum roof trim and wall fascia. Painted plaster soffit is present at entrances, windows and overhangs.
Roof Skylights/Glazing:	There are no skylights present.

Exterior Envelope - Walls	
Exterior Wall Assemblies:	The exterior walls primarily consist of brick veneer. Brick is in moderate to good condition. *Concerns:* • *Several areas of mortar are loose/missing at the front entrance side of the building.* • *Areas of brick at the rear of the building are damaged, cracked and missing*
Joints/Sealants:	Control joints are dry and delaminating from the masonry. These joints should be removed and replaced. *Concerns:* • *The condition of most sealant joints, including the most recent addition, is poor; the sealant is badly cracking and shrinking.*
Perimeter sealant:	The perimeter building sealant has failed in total. *Concerns:* • *This condition is currently allowing water to penetrate the joint.*
Exterior Doors:	Exterior doors are in good condition
Fenestrations:	The condition of the windows are good. Sealant at window frames is beginning to fail. Sealant should be replaced. Windows should be maintained to provide proper functioning and operation. 1 window needs replaced because of failed seal.
Exterior Stairs and Ramps:	Exterior stairs show signs of deterioration and wear. *Concerns:* • *This condition can result in injury and will continue to degrade. Replacement and repair of damaged surfaces should be considered.*

Below: On left, masonry sealant/mortar has failed. On center, the perimeter vent sealant/mortar is disintegrating. This condition is currently allowing water to penetrate the joint. On right, brick spalling near expansion joint. Bottom Left, fascia is out of place, which could allow water to penetrate the wall. Bottom middle, caulking is disintegrating from control joint, which could allow water to penetrate the building. Bottom right,





RECOMMENDATIONS:

- *Consideration should be taken to undergo a thorough masonry cleaning to help preserve the integrity of the exterior wall envelope assemblies.*
- *Strip deteriorated joint sealants and install new elastomeric joint sealants of adequate type; continue to monitor other sealant systems for wear.*
- *Repoint missing mortar, and reseal all masonry infill areas.*
- Fix fascia section so that it creates a continuous seal

Interior Environment

Interior Finishes:

Walls: In public/circulation areas, such as Lobbies and Corridors, the wall finishes are primarily painted CMU or plaster. General classrooms and educational spaces are also CMU. The walls in the Administration Offices and Nurse's Suite are primarily GWB/Plaster as well. The walls in the Restrooms are mainly ceramic tile. The Multipurpose room is also painted CMU. The majority of the CMU wall finishes appear to be in good, well-maintained condition. Patches need done on some of the plaster walls.

Floors: The public/circulation areas have an epoxy terrazzo floor finish. The Classrooms are VCT and Carpet. The Media Center, Music Classroom and most of the Administrative Office spaces have carpet, while most of the Nurse's Suite is VCT. The Restrooms have ceramic tile (CT). The Kitchen has terrazzo. Resinous monolithic floor system is in the Multipurpose Room. The floor finishes appear to be in good condition throughout.

Concerns:

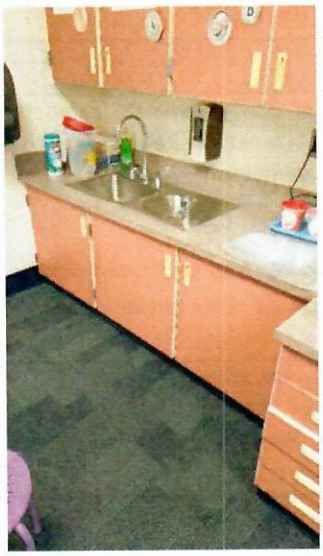
Patch existing walls where necessary

Ceilings: Suspended acoustical tile ceiling (ACT) systems are the

	predominant ceiling finish throughout the building. The ceiling in the Kitchen is painted plaster, which is easily cleanable. The public circulation areas also consist of ACT, as does the Media Center, Administrative Offices and educational spaces. The Multipurpose Room has exposed ceilings. No major ceiling deficiencies were detected.
	RECOMMENDATIONS: • *Overall, interior finishes appear to be in sound condition and are well-maintained. Maintain existing finishes; repair/replaced finishes as needed under maintenance budget especially the 3 plaster walls that are damaged and 3 stained ceiling tiles.*
Interior Doors:	Wood Doors in Hollow Metal Frames: Most common type, including Classrooms and Administrative Offices. FRP Doors, Hollow Metal Frames: Most common in utilitarian applications. Aluminum Entrances: At main entrance, exterior locations. *Concerns:* *Overall, door assemblies appear to be in good, sound condition. Make minor repairs where needed. 2 doors have wire glass, which is not up to code.*
Fire-Rated Openings:	N/A
Accessibility:	It appears that not all current accessibility requirements are met. This includes classroom side clearances, swing direction and glazed opening and hardware locations. *Concern: The Mechanical room is not ADA accessible. Stairs are currently the only means of entrance. 25 door swings do not meet ADA push / pull clearances.*
Door Hardware:	• Locksets consist of lever handles and knobs, The 10 door knobs do not comply with current accessibility requirements. • Egress doors consist of panic device hardware and closers.
Toilet Rooms:	• Large Restrooms: Some group toilet room appear not to be fully-accessible but have quality finishes. Stall partitions are solid surface material and are in good condition, as are plumbing fixtures. The restrooms appear to be missing mirrors. 11 toilets need handicap grab bars. Cover 19 pipes on sinks to meet current codes. The number of sinks need to be increased to match the number of toilets in some bathrooms. • Single-Occupant Restrooms: The single-occupant restrooms are not fully-accessible but have quality finishes; other restrooms were upgraded with new finishes, fixtures and accessories, but not in terms of accessibility. *Concerns:* • *Current accessibility standards require vertical grab bars in handicapped toilet facilities, which do not currently exist in this building, exposed pipes need covered.*

Building Service Areas:	There is a dedicated receiving area next to the Kitchen, which is where most deliveries occur for food service and general items. Dumpsters are located adjacent to this entrance on a concrete pad. It appears that the area adequately accommodates delivery trucks and parking.
Equipment and Furnishings	
Casework and Millwork:	The educational and faculty spaces consist of plastic laminate cabinets, countertops and backsplashes. Open plastic laminated shelving line the exterior walls on either side of the unit ventilators. Overall, these components appear to be in good condition. *Concerns:* • *28 sink base cabinets do not contain open knee space that is required by accessibility provisions; additionally, not all countertop and wall cabinet mounting heights comply.*
Food Service Equipment:	Kitchen equipment appears to meet all health and sanitation codes. *Concerns: The locker & restroom facilities are undersized in the Kitchen, and do not meet ADA accessibility standards. The walk-in cooler & freezer units appear to be under-sized.*
Life Safety- / Accessibility-Related Equipment	• Fire Extinguishers: All fire extinguishers (wall- and cabinet-mounted) appear to meet accessibility requirements as well as applicable NFPA provisions. • Signage: Room panel and wayfinding signs appear to generally comply with accessibility requirements. Emergency response exit numbering/identification appears to be adequately posted to the interior and exterior of exits, meeting Safe Schools published recommendations. • Drinking Fountains: 11 drinking fountains/ electric water coolers appear not to comply with current accessibility standards. • Railings: It appears that most of the railing systems have comply with life safety and accessibility requirements, in terms of handrail and guardrail heights, grip diameters and baluster/guard panel spacing's. • Conveying Systems: There are no elevators or mechanical lifts in the building.
Miscellaneous Equipment & Furnishings:	• Athletic Equipment: There are three basketball backstops; all appear to be in good condition. • Acoustical Control: There are no acoustical wall panels in the building. • Library Furniture: Includes tables, chairs, shelving and related furnishings; all appear to be in good condition. • Display Equipment: White marker boards, tack boards and projection screens are prevalent throughout the building, especially within educational spaces. All appear to be in good condition.
Accessibility & Security Summary / Overview	
Additional Accessibility Concerns:	• No additional serious problems/issues detected.
Security Issues:	• A secured entrance vestibule is provided to require visitors to check in

prior to gaining access to the school. The main administration area can therefore control visitors prior to gaining access to the building interior.



Above: On left, the sink does not have proper ADA clearance. Middle, door does not have proper push/pull clearance. Right, water fountains do not have proper ADA accessibility.

Above: Left. Guard covering the drain pipe is missing from sinks. Right, door knob is not ADA accessible.

RECOMMENDATIONS:

- *Classroom and Faculty sink cabinets and fixtures should be replaced Door hardware needs to be replaced to be ADA compliant. 25 doors need to flipped to become ADA accessible.*

Physical Plant Considerations Below is a "snapshot" of the MEP systems in the condition they were in on the day of our walkthrough.	
HVAC Considerations	
System:	The HVAC system received a comprehensive renovation in 2009. Primary heat addition and rejection is via a geothermal ground loop that is shared with the High/Middle School. The system has both horizontal heat pumps (above ceilings) and floor mounted unit ventilation heat pumps.
Recommendations:	*The 2-way valves on all heat pumps are all forced open to prevent tripping. This will significantly increase pumping energy. Many of the piping branches serving new heat pumps were reused in the 2009 renovation and are leaking and do not have shutoff valves. We recommend that these deficiencies be addressed via selected HVAC upgrades.*
Plumbing Considerations	
System:	Plumbing systems and piping were replaced as part of the 2009 renovation and are in good shape.
Recommendations:	*none*
Fire Protection Considerations	
System:	The building is not sprinklered.
Recommendations:	*Provide a new fire suppression system if desired or required by any suggested building improvements.*
Electrical Considerations	
Electrical Distribution System:	The normal and emergency power systems were installed in 2009 and are in good shape.
Recommendations:	None at this time.
Lighting Systems:	The interior building lighting consists of mostly T8 fluorescent lunimaires. Exterior lighting is Metal Halide.
Recommendations:	*Consider replacement of existing interior fluorescent lighting and exterior metal halide with LED type luminaries to ease frequency of maintenance, for energy savings and to meet the requirements of the International Energy Code (IECC). Provide automatic light control to all areas to comply with the International Energy Conservation Code (IECC) and the International Building Code (IBC)*
Program System and Master Clock System:	The building's paging, intercom, clock, phone and data systems were installed as part of the 2009 renovation and are in good condition.
Recommendations:	none
Fire Alarm System:	The Honeywell Notifier fire alarm system was installed in 2009 and is current.
Recommendations:	None at this Time

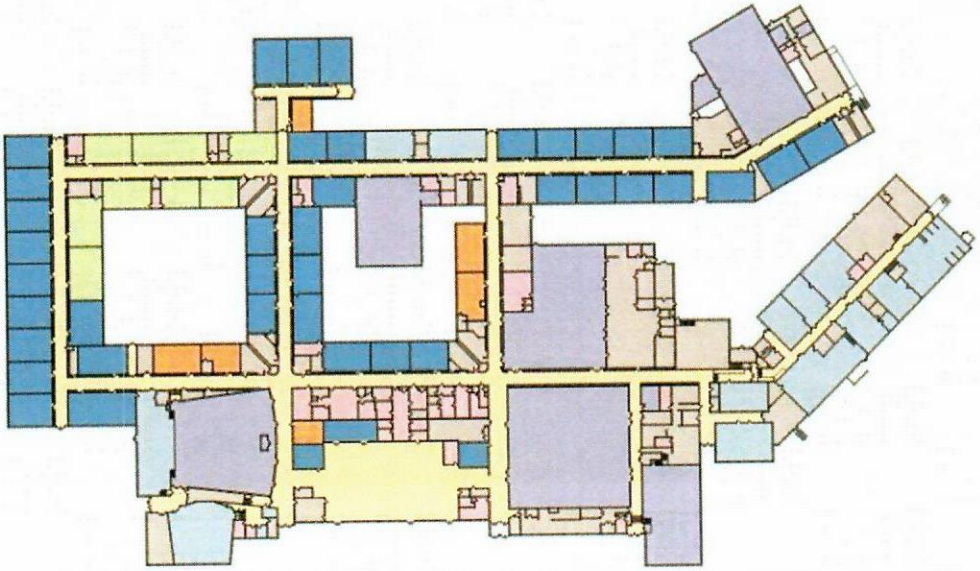
THIS PAGE IS INTENTIONALLY LEFT BLANK

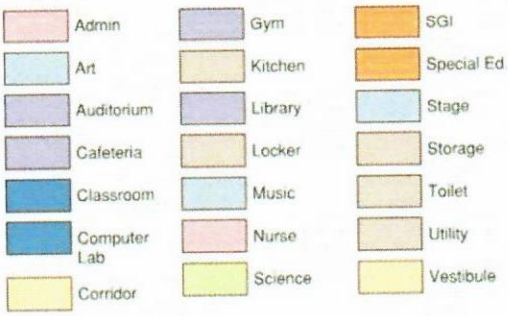
BALD EAGLE MIDDLE SCHOOL / HIGH SCHOOL

Overview:

Address:	710 S Eagle Valley Rd, Wingate, PA 16823
Construction Timeline:	Built 1955; Additions and/or Renovations 1963, 1968, 1975, 1992, 2005
Architectural Area:	± 93,800 SF
Municipalities Served:	Boggs Township, Port Matilda Township, Snow Shoe Township, Howard Township
Current Grade Grouping:	Grades 6 through 12

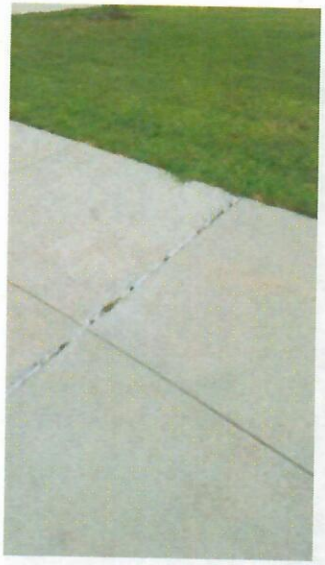
BALD EAGLE MIDDLE SCHOOL / HIGH SCHOOL – EXISTING FLOOR PLANS





Educational Space Considerations:		
Educational considerations noted below are based on PDE and general planning / design guidelines.		
Classrooms:		Classrooms are sized appropriately. Visual display equipment, casework and finishes are in good condition in most spaces. Entrances meet code-required egress widths.
Special Education Classrooms:		Rooms appears to be adequately sized and equipped. Visual display equipment, casework and finishes are in good condition. Entrance meets code-required egress width and clearances.
Small Group:		Used for formal or informal instructional and small group functions. Visual display equipment, casework/equipment & finishes are in good condition.
Art/Music Classrooms:		Adequately sized with ample storage space/rooms. Visual display equipment, casework and finishes are in good condition.
Computer Room:		One space; inadequately sized. Visual display equipment, casework and finishes are in good condition.
Media Center (Library):		Adequate size, with sufficient support spaces, including office/workroom, A/V storage and story area. Visual display equipment, casework, millwork, library furniture & finishes are in good condition.
Cafetorium:		Appropriate size for dining, physical education, large group meeting and performance activities. Visual display, stage and athletic equipment and finishes are in good condition.
Kitchen:		Adequate size preparation and support spaces. Food service prep and serving equipment and finishes are in good condition.
Administration Area:		Includes School Office, Guidance and Nurse. Size, location and adjacencies to one another and each other is good, although there is no close proximity to the main office. The main office does not contain a secured entrance vestibule with check-in. Equipment, casework and finishes are in good condition.
Storage:		Appears to be an adequate amount of general and specific storage rooms/areas, especially in the basement level.
Building Support:		Various mechanical, electrical, custodial and restrooms.
Building Codes:	All projects are to be governed under the provisions of the current Pennsylvania Uniform Construction Code (PA-UCC, including applicable International Code Council family of codes), PA Department of Labor & Industry (L&I), Americans with Disabilities Act Accessibility Guidelines (ADAAG) and local municipality amendments and requirements.	

Building Considerations	
Site Conditions	
General Site Information:	The elementary school is located on a ±214-acre site. The school is located in a dense community, surrounded by fields, forest, residential areas and industrial buildings.
Topography:	The site is primarily moderate-sloping with mild transitions around the building perimeter, especially at the rear. The main floor of the existing building is fully accessible from the front entrance.
Site Circulation:	Parent and school bus drop off occurs at the front of the building. Admin and faculty parking occurs around the east and back of the building.
Site Entrance:	Entrance to the site occurs at S Eagle Valley Rd at the front of the building. Cars and buses both access the site via S Eagle Valley Rd.
Play Areas:	Soccer, football and baseball fields are along the back and east of the building.
Storm Water Management:	There does not appear to be any storm water problems.
Parking:	A parking lot is located to the South and East, at the front of the school. It is accessed from S Eagle Valley Rd. Overall, the asphalt paving parking lot and driveway paving appears to be in fair to good condition, with minor signs of cracking and spalling.
Accessibility, Walkways and Curbing:	The main entrance(s) to the building does meet minimum handicapped accessibility requirements.
Site Amenities:	n/a.
Site Lighting:	Exists around the parking lot and fields.



	RECOMMENDATIONS: • *Monitor concrete for wear/damage; Larger cracked areas should be remediated.* • *Replace missing control joints and sealant at paved areas.* • *Fix Concrete spalling on 2 different staircases* • *Re-seal between concrete stair and building*
Building Structure	
Structural System:	Primarily a one-story structure; the structural system is load bearing masonry. The roof deck is steel.
Exterior Envelope - Roof	
Roof System:	The roof is predominantly single-ply membrane over rigid insulation and tapered crickets, structurally-sloped to roof drains; the original building and much of the additions slope toward the center, in which the water commonly flows into roof drains.
Flashing & Trim:	"Flat" roof edges are capped with a metal fascia/gravel stop system; other flashing includes traditional roof-to-wall terminations. The sloped roof portions consist of standard perimeter/edge trims, such as fascia's, flashings, ridge caps and drip edges. Overall, all the flashing/trim is in good condition just some missing segments.
Soffits/Overhangs:	There are various types and conditions of soffits/overhangs. The facility has aluminum roof trim and wall fascia. Painted plaster soffit is present at entrances, windows and overhangs.
Roof Skylights/Glazing:	There are no skylights present.

	RECOMMENDATIONS: • *The coated EPDM roof is in good-fair condition. It should be monitored for leaks and maintained.* • *Fix missing fascia segments to create a sealed system*
Exterior Envelope - Walls	
Exterior Wall Assemblies:	The exterior walls primarily consist of brick veneer. Brick is in moderate to condition. *Concerns:* • *Several areas of mortar are loose/missing around the entire building.* • *Areas of brick at the rear of the building are damaged, cracked and missing*
Joints/Sealants:	Control joints are dry and delaminating from the masonry. These joints should be removed and replaced. *Concerns:* • *The condition of most sealant joints, is poor; the sealant is badly cracking and shrinking.*
Perimeter sealant:	The perimeter building sealant has failed in total. *Concerns:* • *This condition is currently allowing water to penetrate the joint.*
Exterior Doors:	The condition of the exterior doors is good.
Fenestrations:	Exterior windows were replaced during the most recent renovation. The condition of the windows are good. Sealant at window frames is beginning to fail. Sealant should be replaced. Windows should be maintained to provide proper functioning and operation.

Exterior Stairs and Ramps:	Exterior stairs and ramp show signs of deterioration and wear. Concrete walls and walkways are cracked and spalled. *Concerns:* • *This condition can result in injury and will continue to degrade. Replacement and repair of damaged surfaces should be considered.*

Above: On left spalling brick around exterior drain. Middle, spalling brick at window sills. Right, cracking brick and mortar on exterior of the building.

	RECOMMENDATIONS: • *Repoint missing mortar, and reseal all masonry infill areas.* • *Repair/replace spalling bricks.* • *Patch*
Interior Environment	
Interior Finishes:	Walls: In public/circulation areas, such as Lobbies and Corridors, the wall finishes are primarily GWB/plaster with glazed facing tile wainscot or CMU. General classrooms and educational spaces are also painted CMU. The walls in the Administration Offices and Nurse's Suite are primarily GWB/plaster as well. The walls in the Restrooms are GWB/Plaster with ceramic wall tile. The Multipurpose room is also painted CMU. The majority of the wall finishes appear to be in good, well-maintained condition. Floors: The public/circulation areas have Terrazzo. Classrooms have VCT flooring. The Media Center, Music Classroom and most of the Administrative Office spaces have carpet, while most of the Nurse's Suite is VCT. The Restrooms have ceramic tile (CT). The Kitchen has quarry tile (QT). Resinous monolithic floor system is in the Multipurpose Room. The floor finishes appear to be in good condition throughout. *Concerns:* *Wrestling room padding is in bad shape and should be replaced.* Ceilings: Suspended acoustical tile ceiling (ACT) systems are the

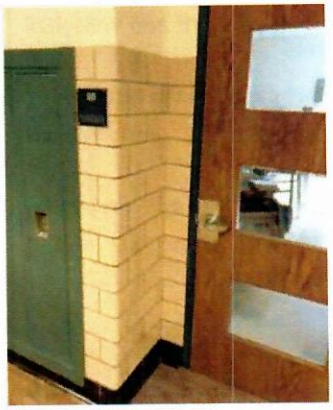
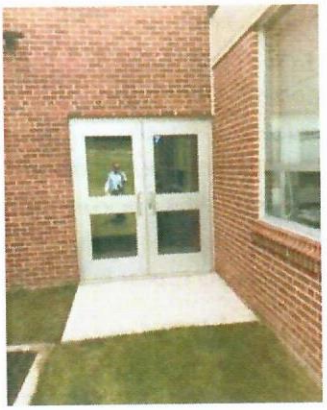
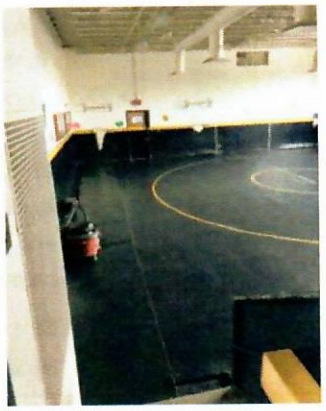
	predominant ceiling finish throughout the building. The ceiling in the Kitchen is painted plaster, which is easily cleanable. The public circulation areas also consist of ACT, as does the Media Center, Administrative Offices and some educational spaces. The Multipurpose Room has ACT as well.
	RECOMMENDATIONS: • *Overall, interior finishes appear to be in sound condition and are well-maintained. Maintain existing finishes; repair/replaced finishes as needed under maintenance budget. 3 ACT tiles have water stains on them and should be replaced.*
Interior Doors:	Wood Doors in Hollow Metal Frames: Most common type, including Classrooms and Administrative Offices. FRP Doors, Hollow Metal Frames: Most common in utilitarian applications. Aluminum Entrances: At main entrance, exterior locations. *Concerns:* *Overall, door assemblies appear to be in good, sound condition.*
Fire-Rated Openings:	N/A
Accessibility:	Not all current accessibility requirements are met. This includes classroom door widths, side clearances, side/frontal approaches, swing direction and glazed opening and hardware locations. *Concern:* 35 doors do not have proper ADA push/pull clearances. 3 exterior doors need proper ADA areas of rescue Wrestling Room needs ADA access Locker Room needs ADA accessibility
Door Hardware:	• Locksets consist of lever handles, which comply with current accessibility requirements. • Egress doors consist of panic device hardware and closers.
Toilet Rooms:	• Large Restrooms: The group toilet room appear to be fully-accessible and have quality finishes. Stall partitions are aluminum and are in good condition, as are plumbing fixtures. The restrooms appear to have adequate accessories. • Single-Occupant Restrooms: The single-occupant restrooms are not fully-accessible; other restrooms were upgraded with new finishes, fixtures and accessories, but not in terms of accessibility. *Concerns:* • *Current accessibility standards require vertical grab bars in handicapped toilet facilities, which do not currently exist in the single bathrooms..*
Building Service Areas:	There is a dedicated receiving area with an elevated loading dock next to the Kitchen, which is where most deliveries occur for food service and general items. It appears that the area adequately accommodates delivery trucks and parking. There is also another raised loading dock near the gym.
Equipment and Furnishings	
Casework and Millwork:	The educational and faculty spaces consist of plastic laminate cabinets, countertops and backsplashes. Wood cabinets and slate countertops in science labs. Wood millwork is present at the Library. Overall, these

	components appear to be in good condition. *Concerns:* • *24 sink base cabinets do not contain open knee space that is required by accessibility provisions; additionally, not all countertop and wall cabinet mounting heights comply.*
Food Service Equipment:	Kitchen equipment appears to meet all health and sanitation codes.
Life Safety- / Accessibility-Related Equipment	• Fire Extinguishers: All fire extinguishers (wall- and cabinet-mounted) appear to meet accessibility requirements as well as applicable NFPA provisions. • Signage: Room panel and wayfinding signs appear to generally comply with accessibility requirements. Emergency response exit numbering/identification appears to be adequately posted to the interior and exterior of exits, meeting Safe Schools published recommendations. • Drinking Fountains: 9 of the drinking fountains/ electric water coolers need to be changed to comply with current accessibility standards. • Railings: It appears that some exterior railings do not comply with life safety and accessibility requirements, in terms of handrail and guardrail heights, grip diameters and baluster/guard panel spacing's. • Conveying Systems: There are no elevators or mechanical lifts in the building.
Miscellaneous Equipment & Furnishings:	• Athletic Equipment: There are two fixed basketball backstops; all appear to be in good condition. There is also a batting cage net and volleyball nets in the gym. • Acoustical Control: There are no acoustical wall panels in the building. • Library Furniture: Includes tables, chairs, shelving and related furnishings; all appear to be in good condition. • Display Equipment: White marker boards, tack boards and projection screens are prevalent throughout the building, especially within educational spaces. All appear to be in good condition. Concerns • Bleachers are not up to code

Accessibility & Security Summary / Overview	
Additional Accessibility Concerns:	• No additional serious problems/issues detected.
Security Issues:	• A secured entrance vestibule is needed to require visitors to check in prior to gaining access to the school. The main administration area can therefore control visitors prior to gaining access to the building interior. .



Above: Left, water fountains are not ADA compliant. Middle, sinks in classrooms are not ADA compliant. Right, sink guards on pipes need to be installed to meet ADA compliance

Above: On left, 25 doors do not meet ADA push / pull compliance. On right, no area of rescue outside the building on 5 exterior doors. Right, stairs are the only access into the wrestling room

RECOMMENDATIONS:

- *Classroom and Faculty sink cabinets and fixtures should be replaced to meet ADA compliance.*
- 25 door hinges need to be flipped to meet ADA compliance
- Bathroom fixtures need to be fixed to meet ADA compliance
- Water fountains need to be replaced to meet ADA compliance
- Areas of recue need to be added on exterior of the building
- Locker room needs to be adapted to be ADA compliant

	• Wrestling Room needs to be adapted to be ADA compliant • ADA access is needed onto the stage

Physical Plant Considerations Below is a "snapshot" of the MEP systems in the condition they were in on the day of our walkthrough.	
HVAC Considerations	
System:	The HVAC system received a comprehensive renovation in 2009. Primary heat addition and rejection is via a geothermal ground loop that is shared with Wingate Elementary School. The system has both horizontal heat pumps (above ceilings) and floor mounted unit ventilation heat pumps. Additionally, the building has a 20 year old 4-pipe system that serves existing classroom and library unit ventilators, along with existing air handling units. This system has gas-fired boiler and a chiller.
Recommendations:	*. The 2-way valves on all heat pumps are all forced open to prevent tripping. This will significantly increase pumping energy. Many of the piping branches serving new heat pumps were reused in the 2009 renovation and are leaking and do not have shut-off valves. The LGI has exposed heat pumps that are very noisy. Finally, the 4-pipe systems that were retained during the 2009 renovation are dated, are at their expected longevity and should be upgraded to be consistent with newer HVAC equipment. The HVAC system does not provide ventilation to most corridors. We recommend that these deficiencies be addressed via selected HVAC upgrades.*
Plumbing Considerations	
System:	Plumbing systems and piping were replaced as part of the 2009 renovation and are in good shape.
Recommendations:	*None at this time.*
Fire Protection Considerations	
System:	The building is not sprinklered.
Recommendations:	*Provide a new fire suppression system if desired or required by any suggested building improvements.*
Electrical Considerations	
Electrical Distribution System:	The normal and emergency power systems were installed in 2009 and are in good shape.
Recommendations:	None at this time.
Lighting Systems:	The interior building lighting consists of mostly T8 fluorescent luminaires. Exterior lighting is Metal Halide.
Recommendations:	*Consider replacement of existing interior fluorescent lighting and exterior metal halide with LED type luminaries to ease frequency of maintenance, for energy savings and to meet the requirements of the International Energy Code (IECC). Provide automatic light control to all areas to comply with the International Energy Conservation Code (IECC) and the International Building Code (IBC)*

Program System and Master Clock System:	The building's paging, intercom, clock, phone and data systems were installed as part of the 2009 renovation and are in good condition.
Recommendations:	Not at this time
Fire Alarm System:	The Honeywell Notifier fire alarm system was installed in 2009 and is current.
Recommendations:	Not at this time

BUILDING ASSESMENT MATRIX

1 Site

	District Administration	Bald Eagle HS/MS	Howard ES	Mountain Top ES	Port Matilda ES	Wingate ES
1.1 Site Size / Acreage	214 acres (shared with Bald Eagle MS/HS and Wingate ES)	214 acres (shared with DAO and Wingate ES)	6 acres	20 acres	5 acres	214 acres (shared with DAO and Bald Eagle MS/HS)
1.2 Overall Condition	Good	Good	Fair	Fair	Fair	Good
1.3 Topography						
Contours	Building on flat pad	Slopes; building on flat pad	Slopes; building on flat pad	Slopes from front to back; building on flat pad	Slopes from side to side	Slopes; building on flat pad
Room for Additions?	Yes	Yes	Minimal	Minimal	Yes	Yes
Adequate Drainage?	Yes	Yes	Yes	Yes	Yes	Yes
1.4 Site Circulation						
Bus/Vehicle Separation?	N/A	Yes	N/A	No	Yes	Yes
Receiving?	N/A	Yes	Yes, but adjacent to play area	Yes, but adjacent to play area	Yes, but adjacent to play area	Yes
1.5 Site Entrance						
Easy Access?	Yes - (1) Main entrance	Yes - (3) entrances/exits	Yes - (2) entrances/exits	Yes - (2) entrances/exits	Yes - (2) entrances/exits	Yes - (2) entrances/exits
1.6 Parking & Sidewalks						
Condition	Good	Good	Fair	Fair	Fair	Good
Sufficient Spaces	Yes	Yes	No	Yes	Yes	Yes
1.7 Play Areas						
Hard & Soft Surfaces?	*Not applicable*	*Not applicable*	Yes	Yes	Yes	Yes
Equipment Condition?	*Not applicable*	*Not applicable*	Fair	Fair	Fair	Good
1.8 Stormwater Management						
Evidence of SWM?	No	Yes	No	No	No	Yes
1.9 Site Lighting						
Existent?	No	Yes	No	No	No	Yes
1.10 ADA Accessibility						
Parking Spaces?	Yes	Yes	Yes	Yes	Yes	Yes
Sidewalks?	Yes	Yes	Yes, but main entrance is NOT accessible	Yes	Yes	Yes
Building Entrances?	Yes	Yes	No	Yes	No-Exterior steps are required to access service entrance	Yes
Play Areas?	*Not applicable*	*Not applicable*	Yes-Ramp from Cafeteria	Yes, except play field below building pad	No. Exterior steps are required to access soft play from hard surface play	Yes
1.11 Other						

2 Building Exterior / Structure	District Administration	Bald Eagle HS/MS	Howard ES	Mountain Top ES	Port Matilda ES	Wingate ES
2.1 Overall Condition	Good	Good	Fair	Fair	Good	Good
2.2 Construction Dates *Built* *Addition/Renovations*	1958/1693 1969, 1975, 2002	2009 2011	1953 1971, 2005 (MEP)	1965 2005 (MEP)	1961 1992	1949 1953, 1992
2.3 Type of Construction *Load bearing, wood frame?*	Masonry walls w/ wood frame, floor & roof structure	Load bearing masonry walls; steel floor structure; steel roof trusses	Load bearing masonry walls w/ limited steel frame; steel roof structure; wood deck on cafeteria	Load bearing masonry walls w/ limited steel frame; steel roof structure	Load bearing masonry walls w/ limited steel frame; steel floor & roof structure	Load bearing masonry walls; steel floor & roof structure
2.4 Cracks / Settlement *Widespread, isolated*	None observed	isolated- spalling on concrete next to the building and a couple bricks; point mortar under a couple windows; missing fascia sections; some mortar and brick cracking	None observed on main building, cracks on side hut, spalling on one step	None observed	isolated- brick missing near foundation at corner, mortar cracking near foundation	None observed on building, some on exterior half wall
2.5 Exterior Walls *Materials* *Condition - stain, mold, re-pointing?*	Brick & EIFS Fair	Brick effloresence on most exterior walls; dented vents; clean up expansion joints	Brick & Metal Fascia Some staining; some repointing required; Repaint fascia on small section of building; words coming off building	Brick, EIFS Infill, & Ribbed Metal Fascia Dirty; Staining, some brick spalling and some concrete steps spalling and cracking; mortar repointing at sills; a section of fascia is bent	Brick, Glazed CMU Infill, & Composite Metal Panels Some staining; some repointing required; cracking and spalling on service entrance concrete	Brick & Limestone Erosion of limestone sills & panels @ ground level; mortar repointing; some staining; spalling on concrete at entrance
2..6 Roof System *Type*	EPDM	Asphalt Shingles	EPDM	EPDM	EPDM	EPDM
2.7 Exterior Doors *Type, Condition*	Aluminum	Aluminum (good)	Aluminium; some HM	Aluminum	Aluminum	Aluminum
2.8 Exterior Windows *Type, Condition* *Double or Single Pane?* *Operable?*	Aluminum (some applied mullions missing) Double Pane Yes	Aluminum, good Double Pane Yes	Aluminim, good Single Pane (original?) Yes	Aluminim, good Single Pane (original?) Yes	Aluminum, good Double Pane w/ integral blinds Yes	Aluminum, good; 1 foggy window Double Pane w/ integral blinds Yes

3 Building Interior						
	District Administration	Bald Eagle HS/MS	Howard ES	Mountain Top ES	Port Matilda ES	Wingate ES
3.1 Overall Condition	Fair	Good	Fair	Fair	Fair	Good
3.2 Interior Walls / Finish						
Classrooms	n/a	CMU & GWB	GWB/Plaster or CMU	CMU	GWB/Plaster	GWB/Plaster or CMU
Corridors	Wood Paneling	CMU & GWB	Plaster w/ CT Wainscot (5' h.) or CMU	CMU	CMU or Plaster w/ CT Wainscot	CMU or plaster
Administration	Wood Paneling	CMU & GWB	GWB/Plaster & Wood Paneling	GWB/Plaster	GWB/Plaster	GWB/Plaster
Toilet Rooms	GWB	CMU & GWB or ceramic tile	Ceramic Tile or GWB/Plaster	Ceramic Tile	tile	Ceramic Tile
Kitchen	n/a	*Not Applicable*	CMU	CMU	CMU	Ceramic Tile
Gymnasium - MP Room	n/a	*CMU*	GWB/Plaster	CMU	CMU	CMU
Cafeteria	n/a	*GWB*	*(combined with Gym)*	*(combined with Gym)*	*(combined with Gym)*	CMU
Library	n/a	*CMU*	CMU	CMU & GWB	GWB/Plaster	CMU
Music	n/a	*Not Applicable*	CMU	GWB/Plaster	GWB/Plaster	Wood & GWB
Art	n/a	*CMU*	not applicable	GWB/Plaster	GWB/Plaster	GWB/Plaster
3.3 Ceilings						
Classrooms	n/a	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile
Corridors	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile
Administration	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile
Toilet Rooms	GWB	Acoustical Ceiling Tile	Acoustical Ceiling Tile	GWB/Plaster	GWB/Plaster	Acoustical Ceiling Tile
Kitchen	n/a	*Not Applicable*	GWB/Plaster & Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile
Gymnasium - MP Room	n/a	*Acoustical Ceiling Tile*	Acoustical Ceiling Tile	Painted Structure	Acoustical Ceiling Tile	Painted Structure
Cafeteria	n/a	*Acoustical Ceiling Til- stain on 2 tiles*	*(combined with Gym)*	*(combined with Gym)*	*(combined with Gym)*	Acoustical Ceiling Tile
Library	n/a	*Acoustical Ceiling Tile*	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile & GWB	Acoustical Ceiling Tile
Music	n/a	*Acoustical Ceiling Tile*	Acoustical Ceiling Tile	Acoustical Ceiling Tile	*(combined with art)*	Acoustical Ceiling Tile
Art	Acoustical Ceiling Tile n/a	*Acoustical Ceiling Tile*	not applicable	Acoustical Ceiling Tile	Acoustical Ceiling Tile	Acoustical Ceiling Tile

3 Building Interior	District Administration	Bald Eagle HS/MS	Howard ES	Mountain Top ES	Port Matilda ES	Wingate ES
3.4 Flooring						
Classrooms	n/a	VCT	VCT or carpet	VCT or carpet	Carpet or VCT	Carpet or VCT
Corridors	Carpet/VCT	Terrazzo or carpet	Terrazzo	Terrazzo	Terrazzo	Terrazzo
Administration	Carpet/VCT	Carpet	Carpet	VCT & Carpet	Carpet	Carpet or VCT
Toilet Rooms	Ceramic Tile	ceramic tile	Ceramic Tile	Ceramic Tile	Ceramic Tile	Ceramic Tile
Kitchen	n/a	*Quarry Tile*	Quarry Tile	Quarry Tile	Quarry Tile	Terrazzo
Gymnasium - MP Room	n/a	*wood*	VCT	VCT	synthetic sports floor	synthetic sports floor
Stage/Platform	n/a	*Not Applicable*	not applciable	not applciable	not applicable	Wood
Cafeteria	n/a	*Terrazzo*	*(combined with Gym)*	*(combined with Gym)*	*(combined with Gym)*	Terrazzo
Library	n/a	*Carpet*	Carpet	Carpet	Carpet	Carpet
Music	n/a	*Not Applicable*	Carpet	Vct	*(combined with art)*	Carpet or VCT
Art	n/a	*Terrazzo*	not applciable	VCT	VCT	VCT
3.5 Doors						
Material	Wood, Hollow Metal	Wood	Wood	Wood	Wood	wood
Hardware ADA?	No	Yes - Levers	yes	no- 11 rooms have knobs	Yes	no- 10 doors have knobs
Wire Glass Frames?	Limited locations	No	yes	No	yes	yes
ADA Clearances?	No	No- 37 doors don't have pull swing clearances	Yes - doors swing directly into corridor	Yes	Yes- 3 doors do not have pull swing clearances	no- 24 doors do not have clearances
3.6 Casework / Furnishings						
Classrooms	n/a	wood & Plastic Laminate	Wood & Plastic Laminate (poor)	Wood & Plastic Laminate (Poor)	Plastic Laminate	Plastic Laminate
Library	n/a	Wood & Plastic Laminate	Wood & Plastic Laminate	Wood & Plastic Laminate	Wood & Plastic Laminate	Wood & Plastic Laminate
Administration	Plastic Laminate	Plastic Laminate	Wood & Plastic Laminate	Wood & Plastic Laminate	Wood & Plastic Laminate	Solid Surface & Plastic Laminate
3.7 Toilet Rooms						
Fixtures	Porcelain	Porcelain	Porcelain	Porcelain	Porcelain	Porcelain
Partitions	n/a	HDPE	Metal	Metal	metal	HDPE
ADA Compliant?	no	Yes	yes	Yes	Yes	Yes
3.8 Kitchen Equipment						
Age / Condition	n/a	*Not Applicable*	Fair	Fair	Good	Good
3.9 ADA						
Fire Entinguishers	Yes	Yes	No	Yes	yes	Yes
Drinking Fountains	Yes	Yes	No	yes	yes	yes
Signage	Yes	Yes	yes	yes	yes	yes
Elevator	Yes	Not Req'd - Single Story	Not Req'd - Single Story	Not Req'd - Single Story	Not Req'd - Single Story	Not Req'd - Single Story

4 MEP						
	District Administration	Bald Eagle HS/MS	Howard ES	Mountain Top ES	Port Matilda ES	Wingate ES
4.1 HVAC Systems	The HVAC system was installed in 2015 as part of a performance contract. It consists of a variable refrigerant flow system for primary heating/cooling and an energy recovery unit for ventilation. Additional heat is provided via radiant ceiling panels in perimeter rooms.	The HVAC system received a comprehensive renovation in 2009. Primary heat addition and rejection is via a geothermal ground loop that is shared with Wingate Elementary School. The system has both horizontal heat pumps (above ceilings) and floor mounted unit ventilation heat pumps. Additionally, the building has a 20 year old 4-pipe system that serves existing classroom and library unit ventilators, along with existing air handling units. This system has gas-fired boiler and a chiller.	The HVAC system was replaced in 1993, and upgraded as part of a 2010 performance contract to include cooling in educational spaces. The building is heated with cast-iron sectional boilers installed in 1993, and cooled with an air cooled chiller installed in 2010. Classrooms have floor mounted unit ventilators, each with independent hot and chilled water coils.	The HVAC system was fully replaced in 1997. In 2007 the central plant was upgraded as part of a performance contract to be a geothermal system. This included the installation of a wellfield and a multi-stack boiler/chiller unit that connected to the building's existing piping distribution system. The boiler/chiller requires manual changeover and does not consistently start in the winter with low water temperatures, necessitating the continuied use of an inefficient oil fired boiler. Loop temperatures go below freezing, decreasing system operating efficiency. Classrooms have floor mounted unit ventilators from 1997 as well as the library, gymnasium and teachers work room HVAC systems.	The HVAC system received a comprehensive renovation in 1999. The system is geothermal, with horizontal heat pumps above ceilings and floor mounted unit ventilator heat pumps. The heat pump refrigeration systems are in poor condition and have been problematic. Controls are standalone with no central DDC panel. The pumping system is constant speed.	The HVAC system received a comprehensive renovation in 2009. Primary heat addition and rejection is via a geothermal ground loop that is shared with the High/Middle School. The system has both horizontal heat pumps (above ceilings) and floor mounted unit ventilation heat pumps.
HVAC System Recommendations	The systems were found to be in very good condition and do not need any attention at this time.	The 2-way valves on all heat pumps are all forced open to prevent tripping. This will significantly increase pumping energy. Many of the piping branches serving new heat pumps were reused in the 2009 renovation and are leaking and do not have shut-off valves. The LGI has exposed heat pumps that are very noisy. Finally, the 4-pipe systems that were retained during the 2009 renovation are dated, are at their expected longevity and should be upgraded to be consistent with newer HvAC equipment. The HVAC system does not provide ventilation to most corridors. We recommend that these deficiencies be addressed via selected HVAC upgrades.	None at this time.	Replace all terminal equipment that was not replaced during the 2007 performance contract. This would include unit ventilators and air handling units. Consider upgrading to a full 4-pipe system that allows for simultaneous cooling and heating. Replace the existing oil fired boiler with a new boiler. Replace existing FCUs that are currently undersized. Rework relief air systems so that egress corridors are not used as a relief air plenum.	The terminal HVAC equipment within the Port Matilda Elementary School has achieved its expected longevity. Consideration should be given to terminal unit and control system replacement.	The 2-way valves on all heat pumps are all forced open to prevent tripping. This will significantly increase pumping energy. Many of the piping branches serving new heat pumps were reused in the 2009 renovation and are leaking and do not have shutoff valves. We recommend that these deficiencies be addressed via selected HVAC upgrades.

4 MEP						
	District Administration	Bald Eagle HS/MS	Howard ES	Mountain Top ES	Port Matilda ES	Wingate ES
4.2 Plumbing Systems	The majority of the plumbing systems were found to be in fair condition. The domestic water heater is electric, and is 4 years old. No issues were noted.	Plumbing systems and piping were replaced as part of the 2009 renovation and are in good shape.	The plumbing systems throughout was replaced as part of the 1993 renovtion and is in fair condition. The fixtures are dated with manual flush valves. The water heater is from 1993 and needs to be replaced. No deficiencies were noted regarding the piping.	The plumbing system throughout was replaced in the 1997 renovation and is in fair condition. The water heater was replaced in 2008 and is in good condition. Fixtures are aging and do not comply with current ADA standards.	The plumbing systems throughout was replaced as part of the 1999 renovtion and is in fair to good condition. The fixtures are dated with manual flush valves. The thermostatic mixing valve is old and does not work properly. The water heater is new but the recirculation pump needs to be replaced. The water softener was recently rebuilt. No deficiencies were noted regarding the piping.	Plumbing systems and piping were replaced as part of the 2009 renovation and are in good shape.
Plumbing Recommendations	None at this time.	None at this time.	If the building is renovated, replace fixtures. Replace the existing domestic water heater.	No specific problems were noted, but if the building is renovated the plumbing system should be replaced througout, including all sanitary and vent piping.	If the building is renovated, replace fixtures. Consider replacement of the recirculation pump and the thermostatic mixing valve.	None at this time.
4.3 Fire Protection Systems	The building does not have a fire sprinkler system.	The building does not have a fire sprinkler system.	The building does not have a fire sprinkler system.	The building does not have a fire sprinkler system.	The building does not have a fire sprinkler system.	The building does not have a fire sprinkler system.
Fire Protection Recommendations	Provide a new fire suppression system if desired or required by any suggested building improvements.	Provide a new fire suppression system if desired or required by any suggested building improvements.	Provide a new fire suppression system if desired or required by any suggested building improvements.	Provide a new fire suppression system if desired or required by any suggested building improvements.	Provide a new fire suppression system if desired or required by any suggested building improvements.	Provide a new fire suppression system if desired or required by any suggested building improvements.
4.4 Electrical/Emergency Distribution Systems	The electric service is dated, and of unknown age. The building does not have an emergency generator.	The normal and emergency power systems were installed in 2009 and are in good shape.	The electrical system was last upgraded as part of the 1993 renovation and is in fair shape.	The electrical system was upgraded as part of the 1997 renovation, and the emergency generator was replaced in 2010.	The normal/emergency power systems were installed as part of the 1999 renovation and are in fair shape.	The normal and emergency power systems were installed in 2009 and are in good shape.
Recommendations	Upgrade panels and emergency generator if the building is renovated.	None at this time.	None at this time.	None at this time.	Upgrade panels and emergency generator if the building is renovated.	None at this time.

4 MEP

	District Administration	Bald Eagle HS/MS	Howard ES	Mountain Top ES	Port Matilda ES	Wingate ES
4.5 Lighting	The interior building lighting consists of mostly T8 fluorescent luminaires.	The interior building lighting consists of mostly T8 fluorescent lunimaires. Exterior lighting is Metal Halide.	The interior building lighting consists of mostly T8 fluorescent lunimaires. Exterior lighting is Metal Halide.	The interior building lighting consists of mostly T8 fluorescent lunimaires. Exterior lighting is Metal Halide.	The interior building lighting consists of mostly T8 fluorescent luminaires with exterior LED wall packs.	The interior building lighting consists of mostly T8 fluorescent lunimaires. Exterior lighting is Metal Halide.
Recommendations	Replace lighting with LED type luminaries to ease frequency of maintenance, for energy savings and to meet the requirements of the International Energy Code (IECC). Provide automatic light control to all areas to comply with the International Energy Conservation Code (IECC) and the International Building Code (IBC)	Consider replacement of existing interior fluorescent lighting and exterior metal halide with LED type luminaries to ease frequency of maintenance, for energy savings and to meet the requirements of the International Energy Code (IECC). Provide automatic light control to all areas to comply with the International Energy Conservation Code (IECC) and the International Building Code (IBC)	If the buildng is renovated, replace all lighting with LED. If the building is not renovated, consider replacement of existing interior fluorescent lighting and exterior metal halide with LED type luminaries to ease frequency of maintenance, for energy savings and to meet the requirements of the International Energy Code (IECC). Provide automatic light control to all areas to comply with the International Energy Conservation Code (IECC) and the International Building Code (IBC)	If the buildng is renovated, replace all lighting with LED. If the building is not renovated, consider replacement of existing interior fluorescent lighting and exterior metal halide with LED type luminaries to ease frequency of maintenance, for energy savings and to meet the requirements of the International Energy Code (IECC). Provide automatic light control to all areas to comply with the International Energy Conservation Code (IECC) and the International Building Code (IBC)	If the buildng is renovated, replace all lighting with LED. If the building is not renovated, consider replacement of existing interior fluorescent lighting and exterior metal halide with LED type luminaries to ease frequency of maintenance, for energy savings and to meet the requirements of the International Energy Code (IECC). Provide automatic light control to all areas to comply with the International Energy Conservation Code (IECC) and the International Building Code (IBC)	Consider replacement of existing interior fluorescent lighting and exterior metal halide with LED type luminaries to ease frequency of maintenance, for energy savings and to meet the requirements of the International Energy Code (IECC). Provide automatic light control to all areas to comply with the International Energy Conservation Code (IECC) and the International Building Code (IBC)
4.6 Paging, Intercom, Clock, Program, Phone, Data	The building's phone and data systems are of unknown age, with no deficiencies identified.	The building's paging, intercom, clock, phone and data systems were installed as part of the 2009 renovation and are in good condition.	The building's paging, intercom, clock, phone and data systems were installed as part of the 1993 renovation and are in fair to poor condition.	The building's paging, intercom, clock, phone and data systems were installed as part of the 1997 renovation and are in fair condition.	The building's paging, intercom, clock, phone and data systems were installed as part of the 1999 renovation and are in fair condition.	The building's paging, intercom, clock, phone and data systems were installed as part of the 2009 renovation and are in good condition.
Recommendations	None at this time.	None at this time.	If the building is renovated, upgrade existing systems.	If the building is renovated, upgrade existing systems.	If the building is renovated, upgrade existing systems.	None at this time.
4.7 Fire Alarm and Security Systems	The building does not have a fire alarm system.	The Honeywell Notifier fire alarm system was installed in 2009 and is current.	The building has a dated Simplex system that is not consistent with the district's newer Honeywell Notifier systems.	The building has a dated Simplex system that is not consistent with the district's newer Honeywell Notifier systems.	The building has a dated Simplex system that is not consistent with the district's newer Honeywell Notifier systems.	The Honeywell Notifier fire alarm system was installed in 2009 and is current.
Recommendations	None at this time.	None at this time.	Upgrade fire alarm system to be a Honeywell Notified system and to meet current codes.	Upgrade fire alarm system to be a Honeywell Notified system and to meet current codes.	Upgrade fire alarm system to be a Honeywell Notified system and to meet current codes.	None at this time.

SECTION 7 - PDE Requirement

ANALYSIS OF CONSTRUCTION / FACILITY OPTIONS - INTRODUCTION

Crabtree, Rohrbaugh & Associates has developed the following preliminary facility options for the School District buildings, to assist the Bald Eagle School District Board of Directors and administration in the decision-making process regarding the future utilization of the educational buildings.

As such, this report should be viewed as a starting point, or benchmark; providing a framework from which decisions regarding prioritized facility upgrades can be made. Any recommendations that result in upgrades to the present facilities should be structured to align with the School District's Mission, Beliefs and Educational Programs.

The information presented outlines various options that the Bald Eagle Area School District can take to address the more pressing facility needs at the K-8 buildings and other facility needs at other district buildings.

The information has been developed to:

- Address the present and foreseeable projected student enrollment
- Identify and address existing facility needs at all district owned buildings in order to renovate and modernize the facility and to extend the useful life of the physical plant and operational systems a minimum of 20 years.
- Provide preliminary construction and projecting cost information as a means of budgeting for any major project, designed to address the school district's facility needs in a prioritized and structured approach.

OPTION DEVELOPMENT

The information presented in this section details various options that the Bald Eagle Area School District can take to address the facility needs and improvements as defined in the information contained within this study.

The PA Department of Education encourages all schools wishing to implement a building improvement project to bring the entire building up to prevailing educational and reasonably current construction standards and code compliance as a condition of reimbursement.

PDE recognizes that every 20 years a building facility should be brought up to prevailing educational and reasonably current construction standards and code compliance. That is why measures for reimbursement are set in place at that time to help with the financial burden. (*As of this writing however, the state has placed a mid-May 2016 moratorium on the Plancon reimbursement process in order to implement an advisory committee to determine the future of the Plancon process)*

Based on the District's desired educational program, additions should be considered to accommodate current and future curriculum, as well as community and recreational usage.

No option presented is intended to be a final solution.

The facility options presented in this study should be viewed as conceptual. The options serve to facilitate the discussion of the overall building layout, and the relationship of elements necessary to reinforce, even enhance the educational programs. The final solution may encompass select components of one or more options whereas the construction costs and floor plan detail are dependent on the final program as well.

The probable construction costs identified are preliminary costs only. Probable costs are prepared to allow the District to identify the approximate value of various construction options. Probable costs are not intended to be an actual indicator of actual project costs and should be identified as preliminary costs only. Costs are based on historical data and building construction cost information. It is not necessary to implement all items on these cost estimates other than code deficient items as required for upgrade. Final project descriptions and more precise costs can be developed as the District develops and finalizes the educational program and scope of improvements.

COSTS SHOULD BE ADJUSTED FOR INFLATION & MARKET CONDITIONS FROM THE DATE OF THIS REPORT. A prioritization of improvements may be necessary to finalize a program or final option/solution.

The Potential Total Project Costs noted in the following Options Analysis include:

- Site and Building Construction Costs (Bid Costs) - based on required site development improvements and a $/per SF for renovations, additions or new construction.

- Construction Contingency and Escalation – construction contingency is a predetermined amount or percentage of the contract held for unpredictable changes in the project. Cost escalation is defined as changes in the cost or price of specific goods or services in a given economy over a period.

- Potential Project "Soft" Costs – "soft" costs are indirect costs associated with a building construction project and vary by project and project cost. These "soft" costs are typically based on a percentage of the construction costs. Typical range of "soft" costs is between 18% - 25% of the construction costs dependent on size and scope of work/project.

  These "soft" costs include, but not limited to the following:
  Professional Fees
  Financing Costs
  Moveable Fixtures and Equipment
  Consultant Fees
  Project Supervision
  Testing and Inspections
  Permits, Agency Approvals
  Reimbursables
  Project Printing
  Project Construction Contingency

HOWARD ELEMENTARY

This Cost Estimate is based on historical average yearly inflation, 2015 RS Means and historical cost data. This estimate may fluctuate based on higher than projected inflation, contractor participation during bidding, and material availability.

COST ESCALATION SET AT:		DESIGN PERIOD			6	MONTHS	
3.0%	PER YEAR	CONSTRUCTION PERIOD			12	MONTHS	
0.25%	PER MONTH				9	MONTHS	
1	**AREA SUMMARY**						
	Existing Building SF		17,527	SF			
	New Building SF		N/A	SF			
	Base Bid Costs Summary						
2	DEMOLITION COST	$ / SF					
	SELECTIVE DEMOLITION	$1.25	$ -				
	GENERAL BUILDING DEMOLITION	$5.00	$ -				
	Subtotal	$6.25	$ -				
3	RENOVATION COST	$ / SF					
	GENERAL CONSTRUCTION	LS	$ 890,046		Roof replacement; ADA & Security upgrades; Interior finishes; Exterior masonry repair		
	MEP CONSTRUCTION	LS	$ 600,000				
	Subtotal	$0.00	$ 1,490,046				
4	NEW CONSTRUCTION COST - BASE BID	$ / SF					
	GENERAL CONSTRUCTION	LS	$ -				
	HVAC CONSTRUCTION	LS	$ -				
	PLUMBING CONSTRUCTION	LS	$ -				
	FIRE PROTECTION	LS	$ -				
	ELECTRICAL CONSTRUCTION	LS	$ -				
	Subtotal	$0	$ -				
5	ASBESTOS ABATEMENT COST	$ / SF					
		LS					
	Subtotal		$ -				
6	SITE WORK						
	GENERAL SITE WORK	LS	$ 336,328		General site improvements & ADA upgrades		
	Subtotal		$ 336,328				
7	SUBTOTAL STRUCTURE COST - BASE BID		$ 1,826,374				
8	ESCALATION FACTORS						
	REGIONAL CONSTRUCTION FACTOR	100%	$ -				
	ESCALATION TO MID POINT	2.00%	$ 36,527				
	ESTIMATING CONTINGENCY	5.00%	$ 91,319				
	SUBTOTAL ESCALATION FACTORS	7.00%	$ 127,846				
	SUBTOTAL ADJUSTED STRUCTURE COST		$ 1,954,220				
9	SUBTOTAL STRUCTURE COST						$ 1,954,220
10	CONSTRUCTION RELATED SOFT COSTS - BASE BID						
	CONSTRUCTION CONTINGENCY	4.00%	$ 78,169				
	CONSTRUCTION TESTING & INSPECTION	1.50%	$ 29,313				
	REGULATORY AGENCY FEES	0.50%	$ 9,771				
	PROJECT SUPERVISION	1.00%	$ 19,542				
	SUBTOTAL CONSTR. SOFT COSTS	7.00%	$ 136,795				
11	STRUCTURE COSTS / SOFT COSTS - BASE BID TOTAL COST OF WORK						$ 2,091,016
12	CRA TOTAL BASIC SERVICE FEES						
	CRA BASE FEE	6.00%	$ 125,461				
13	ADDITIONAL SOFT COSTS						
	CODE REVIEW, SURVEY/TESTING, PRINTING & REIMBURSABLES, ETC	4.00%	$ 83,641				
	SUBTOTAL		$ 209,102				
14	FINANCING						
	FINANCING FEES	2.00%	$ 41,820				
15	MOVEABLE FIXTURES / EQUIPMENT						
	FURNITURE/EQUIPMENT ALLOWANCE	1.50%	$ 31,365				
	SUBTOTAL NON-CONSTR. SOFT COSTS	13.50%	$ 282,287				
16	ESTIMATED TOTAL PROJECT COSTS						$ 2,373,303

MOUNTAINTOP AREA ELEMENTARY

This Cost Estimate is based on historical average yearly inflation, 2015 RS Means and historical cost data. This estimate may fluctuate based on higher than projected inflation, contractor participation during bidding, and material availability.

COST ESCALATION SET AT:			DESIGN PERIOD		6	MONTHS	
3.0%	PER YEAR		CONSTRUCTION PERIOD		12	MONTHS	
0.25%	PER MONTH				9	MONTHS	
1	**AREA SUMMARY**						
	Existing Building SF		37,594	SF			
	New Building SF		N/A	SF			
	Base Bid Costs Summary						
2	DEMOLITION COST	$ / SF					
	SELECTIVE DEMOLITION	$1.25	$ -				
	GENERAL BUILDING DEMOLITION	$5.00	$ -				
	Subtotal	$6.25	$ -				
3	RENOVATION COST	$ / SF					
	GENERAL CONSTRUCTION	LS	$ 334,885		ADA & Security upgrades; Interior finishes; Exterior masonry repair		
	MEP CONSTRUCTION	LS	$ 1,770,000				
	Subtotal	$0.00	$ 2,104,885				
4	NEW CONSTRUCTION COST - BASE BID	$ / SF					
	GENERAL CONSTRUCTION	LS	$ -				
	HVAC CONSTRUCTION	LS	$ -				
	PLUMBING CONSTRUCTION	LS	$ -				
	FIRE PROTECTION	LS	$ -				
	ELECTRICAL CONSTRUCTION	LS	$ -				
	Subtotal	$0	$ -				
5	ASBESTOS ABATEMENT COST						
		LS	$81,372		* District should engage Asbestos consultant for full building assessment and scope		
	Subtotal		$ 81,372				
6	SITE WORK						
	GENERAL SITE WORK	LS	$ 70,605		General site improvements & ADA upgrades		
	Subtotal		$ 70,605				
7	SUBTOTAL STRUCTURE COST - BASE BID		$ 2,256,862				
8	ESCALATION FACTORS						
	REGIONAL CONSTRUCTION FACTOR	100%	$ -				
	ESCALATION TO MID POINT	2.00%	$ 45,137				
	ESTIMATING CONTINGENCY	5.00%	$ 112,843				
	SUBTOTAL ESCALATION FACTORS	7.00%	$ 157,980				
	SUBTOTAL ADJUSTED STRUCTURE COST		$ 2,414,843				
9	SUBTOTAL STRUCTURE COST						$ 2,414,843
10	CONSTRUCTION RELATED SOFT COSTS - BASE BID						
	CONSTRUCTION CONTINGENCY	4.00%	$ 96,594				
	CONSTRUCTION TESTING & INSPECTION	1.50%	$ 36,223				
	REGULATORY AGENCY FEES	0.50%	$ 12,074				
	PROJECT SUPERVISION	1.00%	$ 24,148				
	SUBTOTAL CONSTR. SOFT COSTS	7.00%	$ 169,039				
11	STRUCTURE COSTS / SOFT COSTS - BASE BID TOTAL COST OF WORK						$ 2,583,882
12	CRA TOTAL BASIC SERVICE FEES						
	CRA BASE FEE	6.00%	$ 155,033				
13	ADDITIONAL SOFT COSTS						
	CODE REVIEW, SURVEY/TESTING, PRINTING & REIMBURSABLES, ETC	4.00%	$ 103,355				
	SUBTOTAL		$ 258,388				
14	FINANCING						
	FINANCING FEES	2.00%	$ 51,678				
15	MOVEABLE FIXTURES / EQUIPMENT						
	FURNITURE/EQUIPMENT ALLOWANCE	1.50%	$ 38,758				
	SUBTOTAL NON-CONSTR. SOFT COSTS	13.50%	$ 348,824				
16	ESTIMATED TOTAL PROJECT COSTS						$ 2,932,706

PORT MATILDA ELEMENTARY

This Cost Estimate is based on historical average yearly inflation, 2015 RS Means and historical cost data. This estimate may fluctuate based on higher than projected inflation, contractor participation during bidding, and material availability.

COST ESCALATION SET AT:			DESIGN PERIOD		6	MONTHS		
3.0%	PER YEAR		CONSTRUCTION PERIOD		12	MONTHS		
0.25%	PER MONTH				9	MONTHS		
1	**AREA SUMMARY**							
	Existing Building SF			27,945	SF			
	New Building SF			N/A	SF			
	Base Bid Costs Summary							
2	DEMOLITION COST	$ / SF						
	SELECTIVE DEMOLITION	$1.25	$ -					
	GENERAL BUILDING DEMOLITION	$5.00	$ -					
	Subtotal	$6.25	$ -					
3	RENOVATION COST	$ / SF						
	GENERAL CONSTRUCTION	LS	$ 1,167,233			Roof replacement; ADA & Security upgrades; Interior finishes; Exterior masonry repair		
	MEP CONSTRUCTION	LS	$ 1,220,000					
	Subtotal	$0.00	$ 2,387,233					
4	NEW CONSTRUCTION COST - BASE BID	$ / SF						
	GENERAL CONSTRUCTION	LS	$ -					
	HVAC CONSTRUCTION	LS	$ -					
	PLUMBING CONSTRUCTION	LS	$ -					
	FIRE PROTECTION	LS	$ -					
	ELECTRICAL CONSTRUCTION	LS	$ -					
	Subtotal	$0	$ -					
5	ASBESTOS ABATEMENT COST	$ / SF						
		LS						
	Subtotal		$ -					
6	SITE WORK							
	GENERAL SITE WORK	LS	$ 146,000			General site improvements & ADA upgrades		
	Subtotal		$ 146,000					
7	SUBTOTAL STRUCTURE COST - BASE BID		$ 2,533,233					
8	ESCALATION FACTORS							
	REGIONAL CONSTRUCTION FACTOR	100%	$ -					
	ESCALATION TO MID POINT	2.00%	$ 50,665					
	ESTIMATING CONTINGENCY	5.00%	$ 126,662					
	SUBTOTAL ESCALATION FACTORS	7.00%	$ 177,326					
	SUBTOTAL ADJUSTED STRUCTURE COST		$ 2,710,559					
9	SUBTOTAL STRUCTURE COST							$ 2,710,559
10	CONSTRUCTION RELATED SOFT COSTS - BASE BID							
	CONSTRUCTION CONTINGENCY	4.00%	$ 108,422					
	CONSTRUCTION TESTING & INSPECTION	1.50%	$ 40,658					
	REGULATORY AGENCY FEES	0.50%	$ 13,553					
	PROJECT SUPERVISION	1.00%	$ 27,106					
	SUBTOTAL CONSTR. SOFT COSTS	7.00%	$ 189,739					
11	STRUCTURE COSTS / SOFT COSTS - BASE BID TOTAL COST OF WORK							$ 2,900,298
12	CRA TOTAL BASIC SERVICE FEES							
	CRA BASE FEE	6.00%	$ 174,018					
13	ADDITIONAL SOFT COSTS							
	CODE REVIEW, SURVEY/TESTING, PRINTING & REIMBURSABLES, ETC	4.00%	$ 116,012					
	SUBTOTAL		$ 290,030					
14	FINANCING							
	FINANCING FEES	2.00%	$ 58,006					
15	MOVEABLE FIXTURES / EQUIPMENT							
	FURNITURE/EQUIPMENT ALLOWANCE	1.50%	$ 43,504					
	SUBTOTAL NON-CONSTR. SOFT COSTS	13.50%	$ 391,540					
16	ESTIMATED TOTAL PROJECT COSTS							$ 3,291,838

WINGATE ELEMENTARY

This Cost Estimate is based on historical average yearly inflation, 2015 RS Means and historical cost data. This estimate may fluctuate based on higher than projected inflation, contractor participation during bidding, and material availability.

COST ESCALATION SET AT:			DESIGN PERIOD			6	MONTHS	
	3.0%	PER YEAR	CONSTRUCTION PERIOD			12	MONTHS	
	0.25%	PER MONTH				9	MONTHS	
1	**AREA SUMMARY**							
		Existing Building SF		93,800	SF			
		New Building SF		N/A	SF			
	Base Bid Costs Summary							
2		**DEMOLITION COST**	$ / SF					
		SELECTIVE DEMOLITION	$1.25	$ -				
		GENERAL BUILDING DEMOLITION	$5.00	$ -				
		Subtotal	$6.25	$ -				
3		**RENOVATION COST**	$ / SF					
		GENERAL CONSTRUCTION	LS	$ 705,566		ADA & Security upgrades; Interior finishes; Exterior masonry repair		
		MEP CONSTRUCTION	LS	$ 810,000				
		Subtotal	$0.00	$ 1,515,566				
4		**NEW CONSTRUCTION COST - BASE BID**	$ / SF					
		GENERAL CONSTRUCTION	LS	$ -				
		HVAC CONSTRUCTION	LS	$ -				
		PLUMBING CONSTRUCTION	LS	$ -				
		FIRE PROTECTION	LS	$ -				
		ELECTRICAL CONSTRUCTION	LS	$ -				
		Subtotal	$0	$ -				
5		**ASBESTOS ABATEMENT COST**	$ / SF					
			LS					
		Subtotal		$ -				
6		**SITE WORK**						
		GENERAL SITE WORK	LS	$ 750		General site improvements & ADA upgrades		
		Subtotal		$ 750				
7		**SUBTOTAL STRUCTURE COST - BASE BID**		$ 1,516,316				
8		**ESCALATION FACTORS**						
		REGIONAL CONSTRUCTION FACTOR	100%	$ -				
		ESCALATION TO MID POINT	2.00%	$ 30,326				
		ESTIMATING CONTINGENCY	5.00%	$ 75,816				
		SUBTOTAL ESCALATION FACTORS	7.00%	$ 106,142				
		SUBTOTAL ADJUSTED STRUCTURE COST		$ 1,622,459				
9		**SUBTOTAL STRUCTURE COST**						$ 1,622,459
10		**CONSTRUCTION RELATED SOFT COSTS - BASE BID**						
		CONSTRUCTION CONTINGENCY	4.00%	$ 64,898				
		CONSTRUCTION TESTING & INSPECTION	1.50%	$ 24,337				
		REGULATORY AGENCY FEES	0.50%	$ 8,112				
		PROJECT SUPERVISION	1.00%	$ 16,225				
		SUBTOTAL CONSTR. SOFT COSTS	7.00%	$ 113,572				
11		**STRUCTURE COSTS / SOFT COSTS - BASE BID TOTAL COST OF WORK**						$ 1,736,031
12		**CRA TOTAL BASIC SERVICE FEES**						
		CRA BASE FEE	6.00%	$ 104,162				
13		**ADDITIONAL SOFT COSTS**						
		CODE REVIEW, SURVEY/TESTING, PRINTING & REIMBURSABLES, ETC	4.00%	$ 69,441				
		SUBTOTAL		$ 173,603				
14		**FINANCING**						
		FINANCING FEES	2.00%	$ 34,721				
15		**MOVEABLE FIXTURES / EQUIPMENT**						
		FURNITURE/EQUIPMENT ALLOWANCE	1.50%	$ 26,040				
		SUBTOTAL NON-CONSTR. SOFT COSTS	13.50%	$ 234,364				
16		**ESTIMATED TOTAL PROJECT COSTS**						$ 1,970,395

WINGATE ELEMENTARY (OPTIONS 2D, 2E, 3F)

This Cost Estimate is based on historical average yearly inflation, 2015 RS Means and historical cost data. This estimate may fluctuate based on higher than projected inflation, contractor participation during bidding, and material availability.

COST ESCALATION SET AT:		DESIGN PERIOD			6	MONTHS	
3.0%	PER YEAR	CONSTRUCTION PERIOD			12	MONTHS	
0.25%	PER MONTH				9	MONTHS	
1	**AREA SUMMARY**						
	Existing Building SF		93,800	SF			
	New Building SF		N/A	SF			
	Base Bid Costs Summary						
2	DEMOLITION COST	$ / SF					
	SELECTIVE DEMOLITION	$1.25	$ -				
	GENERAL BUILDING DEMOLITION	$5.00	$ -				
	Subtotal	$6.25	$ -				
3	RENOVATION COST	$ / SF					
	GENERAL CONSTRUCTION	LS	$ 705,566		ADA & Security upgrades, Interior finishes, Exterior masonry repair		
	MEP CONSTRUCTION	LS	$ 810,000				
	Subtotal	$0.00	$ 1,515,566				
4	NEW CONSTRUCTION COST - BASE BID	$ / SF					
	GENERAL CONSTRUCTION	LS	$ 3,855,600				
	HVAC CONSTRUCTION	LS	$ -				
	PLUMBING CONSTRUCTION	LS	$ -				
	FIRE PROTECTION	LS	$ -				
	ELECTRICAL CONSTRUCTION	LS	$ -				
	Subtotal	$0	$ 3,855,600				
5	ASBESTOS ABATEMENT COST	$ / SF					
		LS					
	Subtotal		$ -				
6	SITE WORK						
	GENERAL SITE WORK	LS	$ 214,200		General site improvements & ADA upgrades		
	Subtotal		$ 214,200				
7	SUBTOTAL STRUCTURE COST - BASE BID		$ 5,585,366				
8	ESCALATION FACTORS						
	REGIONAL CONSTRUCTION FACTOR	100%	$ -				
	ESCALATION TO MID POINT	2.00%	$ 111,707				
	ESTIMATING CONTINGENCY	5.00%	$ 279,268				
	SUBTOTAL ESCALATION FACTORS	7.00%	$ 390,976				
	SUBTOTAL ADJUSTED STRUCTURE COST		$ 5,976,342				
9	SUBTOTAL STRUCTURE COST						$ 5,976,342
10	CONSTRUCTION RELATED SOFT COSTS - BASE BID						
	CONSTRUCTION CONTINGENCY	4.00%	$ 239,054				
	CONSTRUCTION TESTING & INSPECTION	1.50%	$ 89,645				
	REGULATORY AGENCY FEES	0.50%	$ 29,882				
	PROJECT SUPERVISION	1.00%	$ 59,763				
	SUBTOTAL CONSTR. SOFT COSTS	7.00%	$ 418,344				
11	STRUCTURE COSTS / SOFT COSTS - BASE BID TOTAL COST OF WORK						$ 6,394,686
12	CRA TOTAL BASIC SERVICE FEES						
	CRA BASE FEE	6.00%	$ 383,681				
13	ADDITIONAL SOFT COSTS						
	CODE REVIEW, SURVEY/TESTING, PRINTING & REIMBURSABLES, ETC	4.00%	$ 255,787				
	SUBTOTAL		$ 639,469				
14	FINANCING						
	FINANCING FEES	2.00%	$ 127,894				
15	MOVEABLE FIXTURES / EQUIPMENT						
	FURNITURE/EQUIPMENT ALLOWANCE	1.50%	$ 95,920				
	SUBTOTAL NON-CONSTR. SOFT COSTS	13.50%	$ 863,283				
16	ESTIMATED TOTAL PROJECT COSTS						$ 7,257,969

WINGATE ELEMENTARY (OPTION 2F)

This Cost Estimate is based on historical average yearly inflation, 2015 RS Means and historical cost data. This estimate may fluctuate based on higher than projected inflation, contractor participation during bidding, and material availability.

COST ESCALATION SET AT:			DESIGN PERIOD		6	MONTHS	
	3.0%	PER YEAR	CONSTRUCTION PERIOD		12	MONTHS	
	0.25%	PER MONTH			9	MONTHS	
1	AREA SUMMARY						
		Existing Building SF		93,800	SF		
		New Building SF		N/A	SF		
	Base Bid Costs Summary						
2		DEMOLITION COST	$ / SF				
		SELECTIVE DEMOLITION	$1.25	$ -			
		GENERAL BUILDING DEMOLITION	$5.00	$ -			
		Subtotal	$6.25	$ -			
3		RENOVATION COST	$ / SF				
		GENERAL CONSTRUCTION	LS	$ 705,566		ADA & Security upgrades; Interior finishes; Exterior masonry repair	
		MEP CONSTRUCTION	LS	$ 810,000			
		Subtotal	$0.00	$ 1,515,566			
4		NEW CONSTRUCTION COST - BASE BID	$ / SF				
			LS	$ 4,971,600			
		Subtotal	$0	$ 4,971,600			
5		ASBESTOS ABATEMENT COST	$ / SF				
			LS				
		Subtotal		$ -			
6		SITE WORK					
		GENERAL SITE WORK	LS	$ 276,200		General site improvements & ADA upgrades	
		Subtotal		$ 276,200			
7		SUBTOTAL STRUCTURE COST - BASE BID		$ 6,763,366			
8		ESCALATION FACTORS					
		REGIONAL CONSTRUCTION FACTOR	100%	$ -			
		ESCALATION TO MID POINT	2.00%	$ 135,267			
		ESTIMATING CONTINGENCY	5.00%	$ 338,168			
		SUBTOTAL ESCALATION FACTORS	7.00%	$ 473,436			
		SUBTOTAL ADJUSTED STRUCTURE COST		$ 7,236,802			
9		SUBTOTAL STRUCTURE COST					$ 7,236,802
10		CONSTRUCTION RELATED SOFT COSTS - BASE BID					
		CONSTRUCTION CONTINGENCY	4.00%	$ 289,472			
		CONSTRUCTION TESTING & INSPECTION	1.50%	$ 108,552			
		REGULATORY AGENCY FEES	0.50%	$ 36,184			
		PROJECT SUPERVISION	1.00%	$ 72,368			
		SUBTOTAL CONSTR. SOFT COSTS	7.00%	$ 506,576			
11		STRUCTURE COSTS / SOFT COSTS - BASE BID TOTAL COST OF WORK					$ 7,743,378
12		CRA TOTAL BASIC SERVICE FEES					
		CRA BASE FEE	6.00%	$ 464,603			
13		ADDITIONAL SOFT COSTS					
		CODE REVIEW, SURVEY/TESTING, PRINTING & REIMBURSABLES, ETC	4.00%	$ 309,735			
		SUBTOTAL		$ 774,338			
14		FINANCING					
		FINANCING FEES	2.00%	$ 154,868			
15		MOVEABLE FIXTURES / EQUIPMENT					
		FURNITURE/EQUIPMENT ALLOWANCE	1.50%	$ 116,151			
		SUBTOTAL NON-CONSTR. SOFT COSTS	13.50%	$ 1,045,356			
16		ESTIMATED TOTAL PROJECT COSTS					$ 8,788,734

WINGATE MIDDLE & HIGH SCHOOLS

This Cost Estimate is based on historical average yearly inflation, 2015 RS Means and historical cost data. This estimate may fluctuate based on higher than projected inflation, contractor participation during bidding, and material availability.

COST ESCALATION SET AT:			DESIGN PERIOD			6	MONTHS	
	3.0%	PER YEAR	CONSTRUCTION PERIOD			12	MONTHS	
	0.25%	PER MONTH				9	MONTHS	
1	AREA SUMMARY							
		Existing Building SF		276,137	SF			
		New Building SF		N/A	SF			
	Base Bid Costs Summary							
2		DEMOLITION COST	$ / SF					
		SELECTIVE DEMOLITION	$1.25	$ -				
		GENERAL BUILDING DEMOLITION	$5.00	$ -				
		Subtotal	$6.25	$ -				
3		RENOVATION COST	$ / SF					
		GENERAL CONSTRUCTION	LS	$ 838,076		ADA & Security upgrades; Interior finishes; Exterior masonry repair		
		MEP CONSTRUCTION	LS	$ 3,700,000				
		Subtotal	$0.00	$ 4,538,076				
4		NEW CONSTRUCTION COST - BASE BID	$ / SF					
		GENERAL CONSTRUCTION	LS	$ -				
		HVAC CONSTRUCTION	LS	$ -				
		PLUMBING CONSTRUCTION	LS	$ -				
		FIRE PROTECTION	LS	$ -				
		ELECTRICAL CONSTRUCTION	LS	$ -				
		Subtotal	$0	$ -				
5		ASBESTOS ABATEMENT COST	$ / SF					
			LS					
		Subtotal		$ -				
6		SITE WORK						
		GENERAL SITE WORK	LS	$ 15,625		General site improvements & ADA upgrades		
		Subtotal		$ 15,625				
7		SUBTOTAL STRUCTURE COST - BASE BID		$ 4,553,701				
8		ESCALATION FACTORS						
		REGIONAL CONSTRUCTION FACTOR	100%	$ -				
		ESCALATION TO MID POINT	2.00%	$ 91,074				
		ESTIMATING CONTINGENCY	5.00%	$ 227,685				
		SUBTOTAL ESCALATION FACTORS	7.00%	$ 318,759				
		SUBTOTAL ADJUSTED STRUCTURE COST		$ 4,872,460				
9		SUBTOTAL STRUCTURE COST						$ 4,872,460
10		CONSTRUCTION RELATED SOFT COSTS - BASE BID						
		CONSTRUCTION CONTINGENCY	4.00%	$ 194,898				
		CONSTRUCTION TESTING & INSPECTION	1.50%	$ 73,087				
		REGULATORY AGENCY FEES	0.50%	$ 24,362				
		PROJECT SUPERVISION	1.00%	$ 48,725				
		SUBTOTAL CONSTR. SOFT COSTS	7.00%	$ 343,072				
11		STRUCTURE COSTS / SOFT COSTS - BASE BID TOTAL COST OF WORK						$ 5,213,532
12		CRA TOTAL BASIC SERVICE FEES						
		CRA BASE FEE	6.00%	$ 312,812				
13		ADDITIONAL SOFT COSTS						
		CODE REVIEW, SURVEY/TESTING, PRINTING & REIMBURSABLES, ETC	4.00%	$ 208,541				
		SUBTOTAL		$ 521,353				
14		FINANCING						
		FINANCING FEES	2.00%	$ 104,271				
15		MOVEABLE FIXTURES / EQUIPMENT						
		FURNITURE/EQUIPMENT ALLOWANCE	1.50%	$ 78,203				
		SUBTOTAL NON-CONSTR. SOFT COSTS	13.50%	$ 703,827				
16		ESTIMATED TOTAL PROJECT COSTS						$ 5,917,359

OPTIONS SUMMARY

Option 1 – Status Quo

Option 1 includes renovations to District Educational facilities only, as described in Section 6 of this study.

Option 2 – K-5 ES; 6-8 MS; 9-12 HS with school closures

Option 2 includes renovations to District Educational facilities, as well as closure of Elementary Schools. Grade levels remain at K-5 for Elementary students, and 6-8 for Middle School students

Enrollment Projection by Grade Group related to Building Capacity

12 Grade level configuration

	Current				Option 2A			Option 2B			Option 2C			Option 2D				Option 2E				Option 2F			
	Current percentage of enrollment (total)	Probable Enrollment	Current Capacity	Utilization	Probable Enrollment	Capacity	Utilization	Probable Enrollment	Capacity	Utilization	Probable Enrollment	Capacity	Utilization	Probable Enrollment	Capacity	Utilization	Addition required	Probable Enrollment	Capacity	Utilization	Addition required	Probable Enrollment	Capacity	Utilization	Addition required
Howard ES	6%	84	150	56%	Close Howard			84	150	56%	84	150	56%	Close Howard				Close Howard				Close Howard			
Mountaintop ES	8%	122	200	61%	122	200	61%	122	200	61%	Close Mountaintop			122	200	61%	no	Close Mountaintop				Close Mountaintop			
Port Matilda ES	8%	115	175	66%	115	175	66%	Close Port Matilda			115	175		Close Port Matilda				115	175	66%		Close Port Matilda			
Wingate ES	22%	325	475	68%	409	475	86%	440	475	93%	447	475	94%	524	600	87%	5 classrooms	531	550	96%	3 classrooms	648	730	89%	10 Classrooms
Grades K - 5	43%	646	1,000	65%	646	850	76%	646	825	78%	646	800	81%	646	800	81%		646	725	89%		646	730	89%	

Option 2 – K-4 ES; 5-8 MS; 9-12 HS with school closures

Option 3 includes renovations to District Educational facilities, as well as closure of Elementary Schools. Grade levels are changed to K-4 for Elementary students, and 5-8 for Middle School students

K	Total Students		1,510	2,549	59%

5-12 Grade level configuration (110 students in 5th grade)

					Option 3A			Option 3B			Option 3C			Option 3D				Option 3E				Option 3F			
	Current percentage of enrollment (Grade Grouping)	Probable Enrollment	Current Capacity	Utilization	Probable Enrollment	Capacity	Utilization	Probable Enrollment	Capacity	Utilization	Probable Enrollment	Capacity	Utilization	Probable Enrollment	Capacity	Utilization	Addition required	Probable Enrollment	Capacity	Utilization	Addition required	Probable Enrollment	Capacity	Utilization	Addition required
Howard ES	13%	70	150	46%	Close Howard			70	150	46%	70	150	46%	Close Howard				Close Howard				Close Howard			
Mountaintop ES	19%	101	200	51%	101	200	51%	101	200	51%	Close Mountaintop			101	200	51%	no	Close Mountaintop				Close Mountaintop			
Port Matilda ES	18%	96	175	55%	96	175	55%	Close Port Matilda			96	175		Close Port Matilda				96	175	55%		Close Port Matilda			
Wingate ES	50%	270	475	57%	339	475	71%	365	475	77%	371	475	78%	435	475	92%	No	440	475	93%	No	536	600	89%	5 Classrooms
Grades K - 4		536	1,000	54%	536	850	63%	536	825	65%	536	800	67%	536	675	79%		536	650	82%		536	600	89%	

BALD EAGLE AREA SCHOOL DISTRICT
District Wide Feasibility Study

OPTION 1

	1	2		3	5	6	7	8	9	10	11	12	13	14	15	16	17
	Building	Project Type	Year Built (Alts & Adds)	Current Enroll	Current Capacity	Planned Capacity	Exist Bldg SF	New Addition	New Tot Area	New Const Costs*	Renovation Const Costs	Site Costs	Const. Related Soft Costs	Contingency / Escalation	High Range Const Costs	Project Soft Costs	High Range Project Costs
	Option 1																
1	**Howard ES**	**Renovation**	1922 (1936, 1970,1998)	79	150	150	17,527		17,527	$ -	$ 1,490,046	$ 336,328	$ 136,795	$ 127,846	$ 2,091,016	$ 282,287	$ 2,373,303
2	**Mountaintop Area ES**	**Renovation**	1962 (1970, 1994)	125	200	200	37,594		37,594	$ -	$ 2,104,885	$ 70,605	$ 169,039	$ 157,980	$ 2,502,509	$ 348,824	$ 2,851,333
3	**Port Matilda ES**	**Renovation**	1965 (1971, 1998)	120	175	175	27,945		27,945	$ -	$ 2,387,233	$ 146,000	$ 189,739	$ 177,326	$ 2,900,298	$ 391,540	$ 3,291,838
4	**Wingate ES**	**Renovation**	1953 (1962, 1967,1990)	359	600	600	93,800		93,800	$ -	$ 1,515,566	$ 750	$ 113,572	$ 106,142	$ 1,736,031	$ 234,364	$ 1,970,395
5	**Wingate MS / HS**	**Renovation**	1955 (63, 63,75,91,05)	929	1,391	1,391	276,137		276,137	$ -	$ 4,538,076	$ 15,625	$ 341,072	$ 318,759	$ 5,213,532	$ 703,827	$ 5,917,359
6	**Totals**			1,612	2,516	2,516	453,003		453,003	$0	$12,035,806	$569,308		$888,054	$14,443,386	$1,960,842	$16,404,228

BALD EAGLE AREA SCHOOL DISTRICT
District Wide Feasibility Study

OPTION 2

	1	2		3	5	6	7	8	9	10	11	12	13	14	15	16	17
	Building	Project Type	Year Built (Alts & Adds)	Current Enroll	Current Capacity	Planned Capacity	Exist Bldg SF	New Addition	New Tot Area	New Const Costs*	Renovation Const Costs	Site Costs	Const. Related Soft Costs	Contingency / Escalation	High Range Const Costs	Project Soft Costs	High Range Project Costs
	Option 2A																
1	Howard ES	Renovation	1922 (1938, 1970,1998)	79	150	150	17,527		17,527				CLOSED				
2	Mountaintop Area ES	Renovation	1962 (1970, 1994)	125	200	200	37,594		37,594	$ -	$ 2,104,885	$ 70,605	$ 169,039	$ 157,980	$ 2,502,509	$ 348,824	$ 2,851,333
3	Port Matilda ES	Renovation	1965 (1971, 1998)	120	175	175	27,945		27,945	$ -	$ 2,387,233	$ 146,000	$ 189,739	$ 177,326	$ 2,900,298	$ 391,540	$ 3,291,838
4	Wingate ES	Renovation	1953 (1962, 1967,1990)	359	600	600	93,800		93,800	$ -	$ 1,515,566	$ 750	$ 113,572	$ 106,142	$ 1,736,031	$ 234,364	$ 1,970,395
5	Wingate MS / HS	Renovation	1955 (63, 63,75,91,05)	929	1,391	1,391	276,137		276,137	$ -	$ 4,538,076	$ 15,625	$ 341,072	$ 318,759	$ 5,213,532	$ 703,827	$ 5,917,359
6	Totals			1,612	2,516	2,516	453,003		453,003	$0	$10,545,780	$232,980		$760,208	$12,352,370	$1,678,555	$14,030,925
	Option 2B																
1	Howard ES	Renovation	1922 (1936, 1970,1998)	79	150	150	17,527		17,527	$ -	$ 1,490,046	$ 336,328	$ 136,795	$ 127,846	$ 2,091,016	$ 282,287	$ 2,373,303
2	Mountaintop Area ES	Renovation	1962 (1970, 1994)	125	200	200	37,594		37,594	$ -	$ 2,104,885	$ 70,605	$ 169,039	$ 157,980	$ 2,502,509	$ 348,824	$ 2,851,333
3	Port Matilda ES	Renovation	1953-93	120	175	175	27,945		27,945				CLOSED				
4	Wingate ES	Renovation	1953 (1962, 1967,1990)	359	600	600	93,800		93,800	$ -	$ 1,515,566	$ 750	$ 113,572	$ 106,142	$ 1,736,031	$ 234,364	$ 1,970,395
5	Wingate MS / HS	Renovation	1955 (63, 63,75,91,05)	929	1,391	1,391	276,137		276,137	$ -	$ 4,538,076	$ 15,625	$ 341,072	$ 318,759	$ 5,213,532	$ 703,827	$ 5,917,359
6	Totals			1,612	2,516	2,516	453,003		453,003	$0	$9,648,573	$423,308		$710,726	$11,543,088	$1,569,302	$13,112,390
	Option 2C																
1	Howard ES	Renovation	1922 (1936, 1970,1998)	79	150	150	17,527		17,527	$ -	$ 1,490,046	$ 336,328	$ 136,795	$ 127,846	$ 2,091,016	$ 282,287	$ 2,373,303
2	Mountaintop Area ES	Renovation	1962 (1970, 1994)	125	200	200	37,594		37,594				CLOSED				
3	Port Matilda ES	Renovation	1953-93	120	175	175	27,945		27,945	$ -	$ 2,387,233	$ 146,000	$ 189,739	$ 177,326	$ 2,900,298	$ 391,540	$ 3,291,838
4	Wingate ES	Renovation	1953 (1962, 1967,1990)	359	600	600	93,800		93,800	$ -	$ 1,515,566	$ 750	$ 113,572	$ 106,142	$ 1,736,031	$ 234,364	$ 1,970,395
5	Wingate MS / HS	Renovation	1955 (63, 63,75,91,05)	929	1,391	1,391	276,137		276,137	$ -	$ 4,538,076	$ 15,625	$ 341,072	$ 318,759	$ 5,213,532	$ 703,827	$ 5,917,359
6	Totals			1,612	2,516	2,516	453,003		453,003	$0	$9,930,921	$498,703		$730,074	$11,940,876	$1,612,018	$13,552,894
	Option 2D																
1	Howard ES	Renovation	1922 (1936, 1970,1998)	79	150	150	17,527		17,527				CLOSED				
2	Mountaintop Area ES	Renovation	1962 (1970, 1994)	125	200	200	37,594		37,594	$ -	$ 2,104,885	$ 70,605	$ 169,039	$ 157,980	$ 2,502,509	$ 348,824	$ 2,851,333
3	Port Matilda ES	Renovation	1953-93	120	175	175	27,945		27,945				CLOSED				
4	Wingate ES	Renov/Additions	1953 (1962, 1967,1990)	359	600	600	93,800		93,800	$ 3,855,600	$ 1,515,566	$ 214,200	$ 418,344	$ 390,976	$ 6,394,686	$ 863,283	$ 7,257,969
5	Wingate MS / HS	Renovation	1955 (63, 63,75,91,05)	929	1,391	1,391	276,137		276,137	$ -	$ 4,538,076	$ 15,625	$ 341,072	$ 318,759	$ 5,213,532	$ 703,827	$ 5,917,359
6	Totals			1,612	2,516	2,516	453,003		453,003	$3,855,600	$8,158,527	$300,430		$867,715	$14,110,727	$1,915,933	$16,026,661
	Option 2E																
1	Howard ES	Renovation	1922 (1936, 1970,1998)	79	150	150	17,527		17,527				CLOSED				
2	Mountaintop Area ES	Renovation	1962 (1970, 1994)	125	200	200	37,594		37,594				CLOSED				
3	Port Matilda ES	Renovation	1953-93	120	175	175	27,945		27,945	$ -	$ 2,387,233	$ 146,000	$ 189,739	$ 177,326	$ 2,900,298	$ 391,540	$ 3,291,838
4	Wingate ES	Renov/Additions	1953 (1962, 1967,1990)	359	600	600	93,800		93,800	$ 3,855,600	$ 1,515,566	$ 214,200	$ 418,344	$ 390,976	$ 6,394,686	$ 863,283	$ 7,257,969
5	Wingate MS / HS	Renovation	1955 (63, 63,75,91,05)	929	1,391	1,391	276,137		276,137	$ -	$ 4,538,076	$ 15,625	$ 341,072	$ 318,759	$ 5,213,532	$ 703,827	$ 5,917,359
6	Totals			1,612	2,516	2,516	453,003		453,003	$3,855,600	$8,440,875	$375,825		$887,061	$14,508,516	$1,958,650	$16,467,165
	Option 2F																
1	Howard ES	Renovation	1922 (1936, 1970,1998)	79	150	150	17,527		17,527				CLOSED				
2	Mountaintop Area ES	Renovation	1962 (1970, 1994)	125	200	200	37,594		37,594				CLOSED				
3	Port Matilda ES	Renovation	1953-93	120	175	175	27,945		27,945				CLOSED				
4	Wingate ES	Renov/Additions	1953 (1962, 1967,1990)	359	600	600	93,800		93,800	$ 4,971,600	$ 1,515,566	$ 276,200	$ 506,576	$ 473,436	$ 7,743,378	$ 1,045,356	$ 8,788,734
5	Wingate MS / HS	Renovation	1955 (63, 63,75,91,05)	929	1,391	1,391	276,137		276,137	$ -	$ 4,538,076	$ 15,625	$ 341,072	$ 318,759	$ 5,213,532	$ 703,827	$ 5,917,359
6	Totals			1,612	2,516	2,516	453,003		453,003	$4,971,600	$6,053,642	$291,825		$792,195	$12,956,910	$1,749,183	$14,706,093

BALD EAGLE AREA SCHOOL DISTRICT
District Wide Feasibility Study

OPTION 3

	1	2		3	5	6	7	8	9	10	11	12	13	14	15	16	17
	Building	Project Type	Year Built (Alts & Adds)	Current Enroll	Current Capacity	Planned Capacity	Exist Bldg SF	New Addition	New Tot Area	New Const Costs*	Renovation Const Costs	Site Costs	Const. Related Soft Costs	Contingency / Escalation	High Range Const Costs	Project Soft Costs	High Range Project Costs
	Option 3A																
1	Howard ES	Renovation	1922 (1936, 1970,1998)	79	150	150	17,527		17,527					CLOSED			
2	Mountaintop Area ES	Renovation	1962 (1970, 1994)	125	200	200	37,594		37,594	$ -	$ 2,104,885	$ 70,605	$ 169,039	$ 157,980	$ 2,502,509	$ 348,824	$ 2,851,333
3	Port Matilda ES	Renovation	1965 (1971, 1998)	120	175	175	27,945		27,945	$ -	$ 2,387,233	$ 146,000	$ 189,739	$ 177,326	$ 2,900,298	$ 391,540	$ 3,291,838
4	Wingate ES	Renovation	1953 (1962, 1967,1990)	359	600	600	93,800		93,800	$ -	$ 1,515,566	$ 750	$ 113,572	$ 106,142	$ 1,736,031	$ 234,364	$ 1,970,395
5	Wingate MS / HS	Renovation	1955 (63, 63,75,91,05)	929	1,391	1,391	276,137		276,137	$ -	$ 4,538,076	$ 15,625	$ 341,072	$ 318,759	$ 5,213,532	$ 703,827	$ 5,917,359
6	**Totals**			1,612	2,516	2,516	453,003		453,003	$0	$10,545,760	$232,980		$760,208	$12,352,370	$1,678,555	$14,030,925
	Option 3B																
1	Howard ES	Renovation	1922 (1936, 1970,1998)	79	150	150	17,527		17,527	$ -	$ 1,490,046	$ 336,328	$ 136,795	$ 127,846	$ 2,091,016	$ 282,287	$ 2,373,303
2	Mountaintop Area ES	Renovation	1962 (1970, 1994)	125	200	200	37,594		37,594	$ -	$ 2,104,885	$ 70,605	$ 169,039	$ 157,980	$ 2,502,509	$ 348,824	$ 2,851,333
3	Port Matilda ES	Renovation	1953-93	120	175	175	27,945		27,945					CLOSED			
4	Wingate ES	Renovation	1953 (1962, 1967,1990)	359	600	600	93,800		93,800	$ -	$ 1,515,566	$ 750	$ 113,572	$ 106,142	$ 1,736,031	$ 234,364	$ 1,970,395
5	Wingate MS / HS	Renovation	1955 (63, 63,75,91,05)	929	1,391	1,391	276,137		276,137	$ -	$ 4,538,076	$ 15,625	$ 341,072	$ 318,759	$ 5,213,532	$ 703,827	$ 5,917,359
6	**Totals**			1,612	2,516	2,516	453,003		453,003	$0	$9,648,573	$423,308		$710,728	$11,543,088	$1,569,302	$13,112,390
	Option 3C																
1	Howard ES	Renovation	1922 (1936, 1970,1998)	79	150	150	17,527		17,527	$ -	$ 1,490,046	$ 336,328	$ 136,795	$ 127,846	$ 2,091,016	$ 282,287	$ 2,373,303
2	Mountaintop Area ES	Renovation	1962 (1970, 1994)	125	200	200	37,594		37,594					CLOSED			
3	Port Matilda ES	Renovation	1953-93	120	175	175	27,945		27,945	$ -	$ 2,387,233	$ 146,000	$ 189,739	$ 177,326	$ 2,900,298	$ 391,540	$ 3,291,838
4	Wingate ES	Renovation	1953 (1962, 1967,1990)	359	600	600	93,800		93,800	$ -	$ 1,515,566	$ 750	$ 113,572	$ 106,142	$ 1,736,031	$ 234,364	$ 1,970,395
5	Wingate MS / HS	Renovation	1955 (63, 63,75,91,05)	929	1,391	1,391	276,137		276,137	$ -	$ 4,538,076	$ 15,625	$ 341,072	$ 318,759	$ 5,213,532	$ 703,827	$ 5,917,359
6	**Totals**			1,612	2,516	2,516	453,003		453,003	$0	$9,930,921	$498,703		$730,074	$11,940,876	$1,612,018	$13,552,894
	Option 3D																
1	Howard ES	Renovation	1922 (1936, 1970,1998)	79	150	150	17,527		17,527					CLOSED			
2	Mountaintop Area ES	Renovation	1962 (1970, 1994)	125	200	200	37,594		37,594	$ -	$ 2,104,885	$ 70,605	$ 169,039	$ 157,980	$ 2,502,509	$ 348,824	$ 2,851,333
3	Port Matilda ES	Renovation	1953-93	120	175	175	27,945		27,945					CLOSED			
4	Wingate ES	Renovation	1953 (1962, 1967,1990)	359	600	600	93,800		93,800	$ -	$ 1,515,566	$ 750	$ 750	$ 106,142	$ 1,623,209	$ 234,364	$ 1,857,573
5	Wingate MS / HS	Renovation	1955 (63, 63,75,91,05)	929	1,391	1,391	276,137		276,137	$ -	$ 4,538,076	$ 15,625	$ 341,072	$ 318,759	$ 5,213,532	$ 703,827	$ 5,917,359
6	**Totals**			1,612	2,516	2,516	453,003		453,003	$0	$8,158,527	$86,980		$582,882	$9,339,250	$1,287,015	$10,626,265
	Option 3E																
1	Howard ES	Renovation	1922 (1936, 1970,1998)	79	150	150	17,527		17,527					CLOSED			
2	Mountaintop Area ES	Renovation	1962 (1970, 1994)	125	200	200	37,594		37,594					CLOSED			
3	Port Matilda ES	Renovation	1953-93	120	175	175	27,945		27,945	$ -	$ 2,387,233	$ 146,000	$ 189,739	$ 177,326	$ 2,900,298	$ 391,540	$ 3,291,838
4	Wingate ES	Renovation	1953 (1962, 1967,1990)	359	600	600	93,800		93,800	$ -	$ 1,515,566	$ 750	$ 113,572	$ 106,142	$ 1,736,031	$ 234,364	$ 1,970,395
5	Wingate MS / HS	Renovation	1955 (63, 63,75,91,05)	929	1,391	1,391	276,137		276,137	$ -	$ 4,538,076	$ 15,625	$ 341,072	$ 318,759	$ 5,213,532	$ 703,827	$ 5,917,359
6	**Totals**			1,612	2,516	2,516	453,003		453,003	$0	$8,440,875	$162,375		$602,227	$9,849,861	$1,329,731	$11,179,592
	Option 3F																
1	Howard ES	Renovation	1922 (1936, 1970,1998)	79	150	150	17,527		17,527					CLOSED			
2	Mountaintop Area ES	Renovation	1962 (1970, 1994)	125	200	200	37,594		37,594					CLOSED			
3	Port Matilda ES	Renovation	1953-93	120	175	175	27,945		27,945					CLOSED			
4	Wingate ES	Renov/Additions	1953 (1962, 1967,1990)	359	600	600	93,800		93,800	$ 3,855,600	$ 1,515,566	$ 214,200	$ 418,344	$ 390,976	$ 6,394,686	$ 863,283	$ 7,257,969
5	Wingate MS / HS	Renovation	1955 (63, 63,75,91,05)	929	1,391	1,391	276,137		276,137	$ -	$ 4,538,076	$ 15,625	$ 341,072	$ 318,759	$ 5,213,532	$ 703,827	$ 5,917,359
6	**Totals**			1,612	2,516	2,516	453,003		453,003	$3,855,600	$6,053,642	$229,825		$709,735	$11,608,218	$1,567,109	$13,175,327

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 8

DISTRICT CURRICULUM - INTRODUCTION

The Bald Eagle Area School District offers a comprehensive K-12 educational program including internal curriculum for special needs students and honors program for accelerated students. A quality program for students result when curriculum, instruction, and assessment are one and the same. As such, the District's academic program is built around a vertical continuum for curriculum to ensure that teachers within a grade level or subject area are teaching and assessing the planned curriculum.

Classroom instruction is organized to provide students a core curriculum in the sciences and the arts. English, Art, Music, Physical Education, Mathematics, Social Studies, and the Sciences are offered at all grade levels as well as remedial and enrichment programs. Due to new knowledge and societal demands, curriculum development is a continuous process. Curriculum development is never complete until it is used in the classroom.

The District prides itself in not only providing a wide variety of courses with optimal career choices, but equally as important, making sure they are educating the entire child to be outstanding citizens regardless of the community in which they decide to take up residency.

The Elementary Schools are child-centered, offering a solid foundation in basic skills. The Middle School plans a strong emphasis on the math and reading/literacy skills. The High School provides many avenues to pursue academics to career technologies. High School students have the option to attend CPI, which is a very aggressive career and technology center.

The District has made huge strides in technology. The District plans on reaching a 1:1 student to computer ratio, enabling schools to assign computers to students, enhancing the day to day learning experience. Each building is rich in technology with interactive smart boards available in most classrooms.

ANALYSIS OF SPECIAL EDUCATION

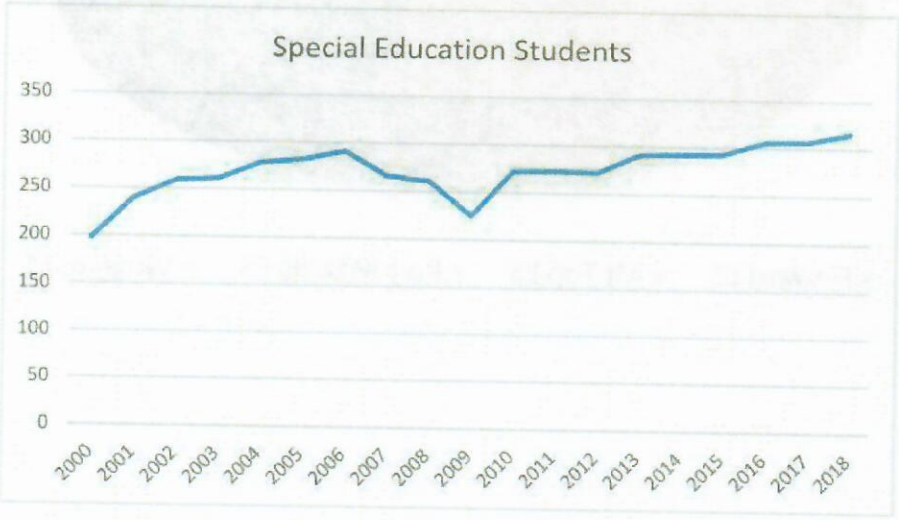
Providing special needs to those required students is paramount to the District. The District strives to provide a supportive and nurturing educational environment for all students. The special needs population is currently served at the central Wingate Elementary and the Bald Eagle Area Middle and High school facilities. Students from surrounding areas are provided transportation to these facilities, which maintains a centralized locale for support and curriculum. The District currently staffs this elementary school special needs curriculum with 5 special education instructors. A dedicated staff is provided for each of the K-1, 2nd, 3rd, 4th and 5th grade student population.

The current Special Education Population includes:

Elementary School:	140 Students	(includes 61 speech/language students receiving Special Needs services at home school)
Middle School:	59 Students	
High School:	119 Students	

The number of students identified in special education has consistently increased since the year 2000. This trend appears to remain consistent, and it is anticipated that the increase in special needs students will be remain constant. These Special Education student populations and trends are depicted in the graphs below:

Calendar Year	Special Education Students	Change in SE Population
2000	198	
2001	240	42
2002	259	19
2003	261	2
2004	278	17
2005	282	4
2006	291	9
2007	266	-25
2008	261	-5
2009	225	-36
2010	272	47
2011	273	1
2012	272	-1
2013	291	19
2014	292	1
2015	293	1
2016	306	13
2017	307	1
2018	318	11



The elementary special needs population currently being transported from the outlying areas of Howard, Mountaintop and Port Matilda Elementary Schools is 34 students. There are also 9 students in these three Elementary Schools who could be included in the special needs program, but have refused service:

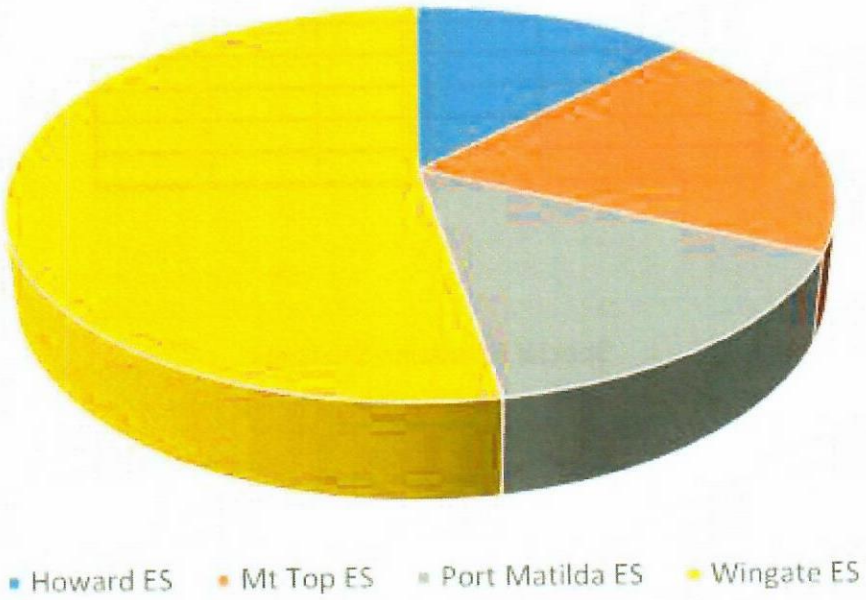
Howard Elementary School: 10 students participating, 1 student refusing service.

Mountaintop Area Elementary School: 15 students participating, 2 students refusing service.

Port Matilda Elementary School: 12 students participating, 6 students refusing service.

Wingate Elementary School: 41 students participating, 0 students refusing service.

Elementary School Special Education Student Population



The District currently staffs 5 Special Education teachers to support these students at Wingate Elementary School. If special education was sourced at each elementary school, rather than centralized at Wingate Elementary School, approximately 60% of each areas special needs population could be removed from Wingate. These students could be serviced at each of their local Elementary School. The remaining outlying special needs population would need to remain at Wingate due to Exceptionality:

Howard ES: 7 students at Howard ES, 4 students at Wingate ES.

Mountaintop Area ES: 15 students at Mountaintop ES, 2 students at Wingate ES.

Port Matilda ES: 9 students at Port Matilda ES, 9 students at Wingate ES

The District would require only 4 Special Education teachers, in lieu of the current 5 staff members, to support the reduced special needs population at Wingate Elementary. However, 2 additional Special Education teachers would need to be provided at each of the 3 outlying elementary schools. The District would be required to increase the entire Special Education staff by 5 additional full time teachers, to support the required special needs population being serviced at Howard, Mountaintop and Port Matilda Elementary Schools. The District would also be required to provide the required special education curriculum and support for each elementary school building. Two classrooms would need to be dedicated to Special Education at each elementary school as well.

The financial impact of the increase in Special Education staff, curriculum and required classroom space upgrades to support the Special Education student population at the 3 outlying elementary schools could total:

Staff (5 Special Education Teachers):	$292,500.00	-	$355,000.00*
Para-professionals (10 to support SE Staff):	$450,000.00	-	$710,000.00*
Annual Total:	$742,500.00	-	$1,065,000.00

Curriculum & Classroom Startup (6 additional):	$72,000.00	-	$90,000.00*
Facility Upgrades (6 Classrooms):	$130,000.00	-	$150,000.00**
First Cost Total:	$202,000.00	-	$240,000.00

*Staff salary, curriculum and classroom start-up estimated costs furnished by BEASD
**Facility Upgrades for Special Education Classrooms are estimates by CRA