DISTRICT WIDE FACILITY STUDY

Blackhawk School District

Beaver County, Pennsylvania



June 29, 2015





DISTRICT WIDE FACILITY STUDY

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Blackhawk School District District Wide Facility Study Update June 29, 2015

Region I: Darlington Township, Darlington Borough, Enon Valley, South Beaver Township, and Chippewa

Township District #4 Paul May (Term ending in 2015) Perry Pander (Term ending in 2017) Lance Rose (Term ending in 2015)

Region 2: Chippewa Township District #1 and 2 and West Mayfield

Dean Fleischman (Term ending in 2017) Kathy Helsing (Term ending in 2017) Missy Kaszer (Term ending in 2015)

Region 3: Chippewa Township District #3, Patterson Heights, and Patterson Township

Tory Aquino (Term ending in 2015) Matt Young (Term ending in 2015) Ken Yonkee (Term ending in 2017)

> Missy Kaszer Board Secretary

Superintendent

Dr. Melanie Kerber

Acting Business Manager John Frombach

Supervisor of Buildings and Grounds Jim Perlik

INTRODUCTION

This 2015 study is intended to update information that has been prepared and presented by the Architectural Firm, Burt Hill in a study prepared April, 2009. This study and all previously completed studies are filed in the District Offices, located at the High School.

More than two years have passed since the most recent study completed by Burt Hill in 2009, therefore this Addendum is necessary to comply with the Pennsylvania Department of Education Basic Education Circular, <u>School Construction Reimbursement Criteria</u>. The Addendum updates portions of the original study that have changed with the passing of time, supplements the original study for compliance with PDE requirements and outlines the analysis of construction options studied during the past two years.

The following timeline is taken from the Burt Hill's 2009 study and provides an overview of the sequence of events and considerations explored by the District since 2005.

EXECUTIVE SUMMARY

BACKGROUND

Following the completion and presentation of a feasibility study done by Hayes Large Architects (HLA) in February 2007, the Blackhawk School District sent out solicitations in the Spring of 2007, to nearly a dozen architects seeking a professional to design and oversee the construction of a new 5-8 middle school, which would replace their existing Highland Middle School facility. Although HLA was one of the final three firms interviewed, Burt Hill was selected in May 2007 to perform the design services. Shortly thereafter, Burt Hill began the programming and planning process for the design of the 5-8 middle school project, which over the course of the next 18 months has now been changed to a 6-8 middle school addition to the Blackhawk School District's existing high school.

Following are the chronological highlights surrounding this district's attempt to place their middle school students into an upgraded environment:

April 2005

HLA was contracted to complete a district-wide facility study for improvements, renovations, and new construction options for the district.

October 2005 & January 2006

Public input was actively sought through two public meetings while HLA visited each of the buildings in the district and compiled data in terms of upgrade casts to each building.

February 2006 (ORIGINAL HLA STUDY)

HLA presented eight scenarios to the Board. These eight options did not have costs per option, and HLA was asked to return in August with estimates for each option.

August 2006

HLA estimates ranged from \$5.5 million for "warm, safe, and dry improvements" to \$56.8 million to convert BIS to K-3 and to create a new grade 4-8 building on the Highland site.

October 2006

Further discussion of the options took place based on feedback from HLA and other stakeholders. The Board decided to focus on upgrading the Highland site while also pursuing the cost to add grades 6 and 7 to the high school.

February 2007 (HLA ADDENDUM #1)

HLA presented options to add grades 6 and 7 to the high school. Costs ranged from \$33 million to \$39 million. The Board once again reviewed all of their options and decided to further advance the option of building a new 5-8 middle school on the Highland site and re-opened the selection for architectural services.

May 2007

After receiving numerous architectural proposals for professional design services and conducting interviews, the Board interviewed three architectural firms (including HLA) and awarded Burt Hill a contract to create plans for a new 5-8 Highland Middle School.

September - November 2007

After multiple discovery sessions with staff, board, community, students, and administration, Burt Hill made their initial presentation to the Board on November 15, 2007 for the design of a new 5-8 Highland Middle School. In addition to the middle school design, Burt Hill also reviewed engineering study data, which pointed to the need for significant capital outlays at the high school.

As a result of continuing community debate and concurrent with the design of a new 5-8 middle school, the Board elected to re-visit the idea of leaving grade 5 at BIS and once again consider placing grades 6 and 7 at the high school. Burt Hill was asked to investigate this option, as well as other options to deal with the high school engineering and infrastructure issues.

December 2007 - February 2008 (BURT HILL ADDENDUM #1)

Burt Hill, Massaro (the district's construction management consultant), and the Blackhawk superintendent refined building options to include an energy performance contract to deal with infrastructure issues at the high school. By moving grades 6 and 7 to the high school, two new options were also developed for the creation of a 6-8 middle school arrangement in lieu of a 5-8 arrangement.

- Build a smaller new 6-8 middle school on the Highland site.
- Merge the 8th graders from within the high school into a new 6-8 wing at the high school.

The idea of constructing a 6-8 middle school wing to the existing high school was positively supported by the Board at the February 2008 meeting, and Burt Hill was directed to begin looking at the financial impact and design considerations for this option.

June 2008 (BURT HILL ADDENDUM #2)

Upon reviewing and comparing the HLA and Burt Hill grade level options, building options, and cast estimates presented to the Board over nearly a 2-½ year time period, it was determined that Burt Hill would proceed with the design of a 6-8 middle school addition to the high school that would also address code and ADA deficiencies at the high school and other mechanical, site, and building needs not addressed by the energy performance contract.

The Board decided to proceed with Burt Hill's Option 3A – a design that was to be based upon current enrollment only and 200 students per grade level – and authorized Burt Hill to initiate the Schematic Design and PlanCan Part A process for this project.

February 2009

After the cancellation of two previously scheduled Board meetings, Burt Hill submitted the PlanCon Part A documents for a consolidated 6-12 project to the Blackhawk School Board for their approval on February 19, 2009. The Board made a motion to approve the PlanCon submittal on this date.

March 2009

Burt Hill and representatives from the Blackhawk School District met with PDE to have a PlanCon Part A & B review on their project. The plan review went well. However, due to the expiration of Haryes Large Architects original study and disagreement by PDE in the completion of PlanCon Page A23 and the addendum documents submitted by Burt Hill, Burt Hill was required to prepare a new study, which will be an addendum to Hayes Large Architects original study.

April 2009

Burt Hill has reviewed the original Hayes Large Architect study and created a completely new study provided herein. This new study recognizes Hayes Large Architects information that still remains viable, or in other cases, needs further evaluation or updates. This latest study received a cursory review by Carle Dixon, PDE, an April 13, 2009, and Burt Hill subsequently made revisions to this document based upon her comments.

June 2015

At this time the District is considering what options they have at Northwestern Primary School. Eckles Architecture and Engineering was hired to provide assistance in exploring the options. The options being explored include renovations to the existing facility as well as closing and redistributing the students into other district buildings.

• The district is also exploring options for the location of their football stadium themselves through an Ad-hoc committee.

SECTION 1 – DISTRICT OVERVIEW

Section 1 constitutes an overview of the school district including such factors as geography, population, wealth and distinguishing characteristics that will have an impact on facilities.

Facility Stud	ly Process: Need for the Study	
	PlanCon Facility Study Guidelines	page 2-4
District Info	rmation:	
	District Overview	pages 5 - 7
	State Basic Education Funding	
	Real estate taxes	
	Act 1 adjusted index	
District Map)S	pages 8-9
Distinguishi	ing Characteristics	page 10
Enrollment		pages 10-11



NEED FOR THE STUDY

The Pennsylvania Department of Education Part A Attachment C describes the need for the District Wide Facility Study and outlines the requirements for the information provided in the study. The PDE Attachment C is provided below. The District is considering options for renovations to Northwestern Primary Center. The district is considering using state reimbursement for this project. The guidelines for updating the District Wide Facility study within 2 years of the project require this update since the last study was completed in 2009.

ATTACHMENT C PAGE 1 OF 3

DISTRICT-WIDE FACILITY STUDY GUIDELINES

Basic Education Circular (BEC) 24 P.S. § 7-733, "School Construction Reimbursement Criteria," explains the requirement for school building district-wide facility studies as a condition for reimbursement.

School districts must develop a complete building facility study of all district educational facilities including the district administration office. The study must be completed prior to, and within two years of, the Department's receipt of the PlanCon Part A "Project Justication" submission. The study must provide an appraisal as to each facility's ability to meet current and planned educational program requirements, the degree to which the present facilities meet reasonably current construction standards, and an estimated cost of necessary repairs and improvements. Facility studies must contain documentation regarding the authors' credentials for producing the document.

The Department no longer requires the entire facility study to be submitted. In lieu of the study, Page A23, District-Wide Facility Study Certification, must be submitted. The Department of Education, however, reserves the right to request a copy of the entire district-wide facility study. Completion of a district-wide facility study is a <u>prerequisite</u> to submission of Part A. A PlanCon project must be one of the options evaluated and considered in the study.

Before the Commonwealth will consider a building project for reimbursement, school districts must demonstrate that they have evaluated all of their facilities. The purpose of the district-wide facility study is to develop a plan for addressing the **entire** school district's facility needs. The study must consider how well each building lends itself to the school district's current and planned educational program, both in terms of the building's **design** (e.g., arrangement, number, layout and size of various spaces relative to current and projected enrollment) and **structure** (e.g., soundness, compliance with codes, access, environmental conditions). When the study indicates some inadequacy or deficiency, it must provide an estimate of the cost to correct the problem.

It is important to remember that PlanCon is designed as an administrative tool with the primary purpose of documenting planning and determining subsidy. It contains assumptions that may not apply to a particular school district. PlanCon, for instance, computes full time equivalent elementary capacity based on the assumption of 25 students per room. Secondary capacity presumes a 90 percent utilization rate. Capacity for special education rooms is calculated only for reimbursement purposes. It is important that facility studies provide a clear explanation of methodologies used to determine such things as capacity and enrollment.

District-wide facility studies must contain all of the following elements and include answers to all of the questions asked:

- An overview of the school district that considers such factors as geography, population, wealth. The overview must include:
 - a. population and wealth statistics
 - b. a map showing the general location of the school district in the state or geographic region
 - c. a map of the school district showing the general location of all existing buildings and owned sites in the school district
 - d. information on any distinguishing characteristics, such as geographically separate population centers, that will have an impact on facilities.

ECKLES architecture

ATTACHMENT C PAGE 2 OF 3

- An overview of the school district's educational program. The overview must address for <u>all grades (K-12)</u>:
 - a. instructional practices or planned curriculums by grade structure (elementary, middle, secondary, etc.)
 - b. special facility needs, if applicable, needed to support planned curriculums.
- 3. An analysis of projected enrollment. The analysis must include:
 - a. the likely enrollment for each grade structure ten years into the future
 - b. a discussion of the reliability of the enrollment projections.
- An analysis of each building's capacity as it relates to the educational program. The analysis must address:
 - a. how many students a building can house
 - b. the types of educational spaces required by the educational program described above
 - c. grade alignments
 - d. length of the school day and number of classes per day, if applicable
 - e. size of particular rooms and adequacy of those rooms, if applicable.
- 5. An analysis of each building's condition. The analysis must address:
 - a. the building's physical condition
 - b. the projected useful life of each building's major components (electrical, HVAC, plumbing, etc.)
 - c. code violations
 - d. universal accessibility
 - e. Energy Portfolio Surveys
 - f. the cost to upgrade each building to current standards.
- 6. An analysis of construction options. The analysis must address:
 - a. the alternatives available to the school district based on the above analysis
 - b. cost estimates for each alternative
 - c. the pros and cons for each alternative
 - d. a summary page depicting options and costs.
 - e. Energy Portfolio Surveys
- Documentation regarding the authors' credentials. This section must include the education, registration or licensure and experience for each author.

Energy Portfolio Surveys:

Within the District-Wide Facility Study, Energy Portfolio Surveys must be included for each exsting building and for each construction option that is being considered. The specific requirements for these Surveys are as follows:

1. Surveys for each Existing Building:

This Survey entails facility benchmarking, using the EPA/DOE Portfolio Manager Tool, identifying the annual site and source energy and annual water consumption.



ATTACHMENT C PAGE 3 OF 3

Portfolio Manager is an interactive energy management tool that helps track and assess a building's energy and water consumption. Portfolio Manager requires the input of existing utility bills and basic facility data.

Accessing Portfolio Manager:

Portfolio Manager is a no-cost online tool that can be accessed at http://www.energystar.gov/schools. Under "Quick Finder," select "Portfolio Manager Login." Follow steps to register as a new user. When entering information in the "Facility Name" field, use the following standard naming format: School District Name, School Name, Administrative Unit Number (AUN). For example: Harrisburg City SD Harrisburg HS 115222752.

To allow the PDE Administrator to view data, follow the steps in the "Share Facilities" feature. In Step 1, in the field labeled "Select a Portfolio Manager Master Account," select "PDE School Facilities - PDEPLANCON" from the dropdown list. On the next screen, select the access role of "Read Only." Under "Optional Rights," retain all defaults at "No."

Portfolio Manager Training Recommendations:

Under "Quick Finder," select "Training." On the next screen, select "pre-recorded trainings." From the Topic list (Page 2), select "K-12 Benchmarking 101."

The Benchmarking Starter Kit, designed to assist users to get started quickly, can be accessed from the Home Page. Under "What You Can Do," click on "Portfolio Manager" to access the "Benchmarking Starter Kit."

Surveys for each Construction Option (ie: for each New Building, Building Alteration, and/or Building Additions/Alterations)

This Survey entails providing a predicitive utility budget, using the EPA/DOE Target Finder tool, identifying the annual site and source energy and annual water consumption.

Target Finder helps establish an energy performance target for new design projects and major building renovations.

Accessing Target Finder:

Target Finder is a no-cost online tool, that can be accessed at http://www.energystar.gov/schools. A login process is not required to access Target Finder. Under "Quick Finder," select "Target Finder." Click on the green box, "ENTER TARGET FINDER."

Reports generated in Target Finder are not stored in Target Finder. They must be printed or stored electronically.

Note: Career and Technology Centers/Area Vocational Technical Schools must use the "Other" category when defining "Space Type" within Portfolio Manager and Target Finder.



DISTRICT INFORMATION

District Background

District Overview:

From Wikipedia:

The **Blackhawk School District** is a small, rural public school district that spans portions of two counties in Pennsylvania. Blackhawk School District encompasses approximately 64 square miles (170 km²). In Beaver County it covers the Boroughs of Darlington, Patterson Heights and West Mayfield and Chippewa Township, Darlington Township, Patterson Township and South Beaver Township. In Lawrence County it covers the Borough of Enon Valley. According to 2000 federal census, it serves a resident population of 17,322 people. In 2009, the district residents' per capita income was \$21,310, while the median family income was \$52,242^[10] In the Commonwealth, the median family income was \$49,501^[11] and the United States median family income was \$49,445, in 2010.^[12] According to District officials, as of May 2015 the Blackhawk School District provided basic educational services to 2,400 pupils. Blackhawk School District received more than \$13.1 million in state funding in school year 2007-08.

Blackhawk School District operates: Blackhawk High School (9th-12th), Highland Middle School (6th-8th), Blackhawk Intermediate School (3rd-5th), Northwestern Primary School (K-2nd) and Patterson Primary School (K-2nd). The District also offers a taxpayer funded, free preschool for 4 year olds, at the Intermediate School. High school students may choose to attend Beaver County Career and Technology Career for training in the construction and mechanical trades. The Beaver Valley Intermediate Unit IU27 provides the District with a wide variety of services like specialized education for disabled students and hearing, speech and visual disability services and professional development for staff and faculty.

State basic education funding:

From Wikipedia:

According to a report from Representative Todd Stephens office, Blackhawk School District receives 46.3% of its annual revenue from the state.

For the 2014-2015 school year, Blackhawk School District will receive \$8,936,909 in State Basic Education funding. The District will also receive \$280,552 in new Ready To Learn Block grant. The State's enacted Education Budget includes \$5,526,129,000 for the 2014-2015 Basic Education Funding. The Education budget also includes Accountability Block Grant funding at \$100 million and \$241 million in new Ready to Learn funding for public schools that focus on student achievement and academic success. The State is paying \$500.8 million to Social Security on the school employee's behalf and another \$1.16 billion to the state teacher's pension system (PSERS). In total, Pennsylvania's Education budget for K-12 public schools is \$10 billion. This was a \$305 million increase over 2013-2014 state spending and the greatest amount ever allotted by the Commonwealth for its public schools.



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY SECTION 1 – DISTRICT OVERVIEW Page 5 of 11

Real estate taxes:

From Wikipedia:

Property tax rates in 2014-2015 were set by the school board at 57.6725 mills in Beaver County and 17.48 mills in Lawrence County. A mill is \$1 of tax for every \$1,000 of a property's assessed value. Irregular property reassessments have become a serious issue in the commonwealth as it creates a significant disparity in taxation within a community and across a region. Property taxes, in the Commonwealth of Pennsylvania, apply only to real estate - land and buildings. The property tax is not levied on cars, business inventory, or other personal property. Certain types of property are exempt from property taxes, including: places of worship, places of burial, private social clubs, charitable and educational institutions and government property. Additionally, service related, disabled US military veterans may seek an exemption from paying property taxes. Pennsylvania school district revenues are dominated by two main sources: 1) Property tax collections, which account for the vast majority (between 75-85%) of local revenues; and 2) Act 511 tax collections. which are around 15% of revenues for school districts. The school district includes municipalities in two counties, each of which has different rates of property tax assessment, necessitating a state board equalization of the tax rates between the counties. In 2010, miscalculations by the board were widespread in the Commonwealth and adversely impacted funding for many school districts. including those that did not cross county borders.

- 2013-2014 56.1400 mills in Beaver County
- 2012-2013 54.9400 mills in Beaver County and 17.2000 mills in Lawrence County

The average yearly property tax paid by Beaver County residents amounts to about 3.49% of their yearly income. Beaver County ranked 375th out of the 3143 United States counties for property taxes as a percentage of median income. According to a report prepared by the Pennsylvania Department of Education, the total real estate taxes collected by all school districts in Pennsylvania rose from \$6,474,133,936 in 1999-00 to \$10,438,463,356 in 2008-09 and to \$11,153,412,490 in 2011. Property taxes in Pennsylvania are relatively high on a national scale. According to the Tax Foundation, Pennsylvania ranked 11th in the U.S. in 2008 in terms of property taxes paid as a percentage of home value (1.34%) and 12th in the country in terms of property taxes as a percentage of income (3.55%).

Act 1 Adjusted Index:

From Wikipedia:

The Act 1 of 2006 Index regulates the rates at which each school district can raise property taxes in Pennsylvania. Districts are not allowed to raise taxes above that index unless they allow voters to vote by referendum, or they seek an exception from the state Department of Education. The base index for the 2011-2012 school year is 1.4 percent, but the Act 1 Index can be adjusted higher, depending on a number of factors, such as property values and the personal income of district residents. Act 1 included 10 exceptions, including: increasing pension costs, increases in special



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY SECTION 1 – DISTRICT OVERVIEW Page 6 of 11

education costs, a catastrophe like a fire or flood, increase in health insurance costs for contracts in effect in 2006 or dwindling tax bases. The base index is the average of the percentage increase in the statewide average weekly wage, as determined by the PA Department of Labor and Industry, for the preceding calendar year and the percentage increase in the Employment Cost Index for Elementary and Secondary Schools, as determined by the Bureau of Labor Statistics in the U.S. Department of Labor, for the previous 12-month period ending June 30. For a school district with a market value/personal income aid ratio (MV/PI AR) greater than 0.4000, its index equals the base index multiplied by the sum of .75 and its' MV/PI AR for the current year. In June 2011, the Pennsylvania General Assembly eliminated six of the ten exceptions to the Act 1 Index. The following exceptions were maintained: 1) costs to pay interest and principal on indebtedness incurred prior to September 4, 2004 for Act 72 schools and prior to June 27, 2006 for non-Act 72 schools; 2) costs to pay interest and principal on electoral debt; 3) costs incurred in providing special education programs and services (beyond what is already paid by the State); and 4) costs due to increases of more than the Index in the school's share of payments to PSERS (PA school employees pension fund) taking into account the state mandated PSERS contribution rate.

The School District Adjusted Index for the Blackhawk School District 2006-2007 through 2011-2012.

- 2014-15 2.7%, Base 2.1%
- 2015-16 2.5%, Base 1.9%

For the 2014-2015 budget year, Blackhawk School Board did not apply for exceptions to exceed their Act 1 Index limit. In 2014-15, all Pennsylvania school districts were required to make a 21.4% of payroll payment to the teacher's pension fund (PSERS). For the school budget 2014-15, 316 Pennsylvania public school districts adopted a resolution certifying that tax rates would not be increased above its Act 1 Index limit. Another 181 school districts adopted a preliminary budget leaving open the option of exceeding the Index limit. Districts may apply for multiple exceptions each year. For the pension costs exception, 163 school districts received approval to exceed the Index in full, while others received a partial approval of their request. For special education costs, 104 districts received approval to exceed their tax limit. Seven Pennsylvania public school districts received an approval for the grandfathered construction debts exception.



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY SECTION 1 – DISTRICT OVERVIEW Page 7 of 11



District Owned Buildings

Elementary Schools

Northwestern Primary School Patterson Primary School

Secondary Schools

Blackhawk Intermediate School Middle School High School

Stadium – Located at Northwestern Primary School **Athletics** – Darlington Athletic Building **District Offices** – Located at High School



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District Location Map

The map below locates the Blackhawk School District within Beaver County and shows its proximity to the surrounding Districts. There is also a portion of the District that is located in Lawrence County.





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Distinguishing Characteristics

One distinguishing characteristic of the Blackhawk School District is its large demographic area. The Northwestern Primary Center is located farthest from the district center and serves students from a large geographical area. The remote location of Northwestern makes it difficult to consider eliminating the building. If the school was closed, the students would have long bus travel to get to the other district buildings. Further complicating this issue is the fact that the District's stadium is located at Northwestern. This location is remote from the High School campus and makes travel to practice and games difficult. The size of the district, location of stadium and travel time will play a large role in the discussions regarding redistricting, grade re-alignment and overall consolidation.

<u>District Enrollment</u>

The following table illustrates the district enrollment projections prepared by the Pennsylvania Department of Education. The information gathered by the PDE is only current as of 2012. The PDE has stopped updating the enrollment projections after that time. For the purposes of this facility study a combination of PDE enrollment projections and actual enrollment figures are used. The PDE projections and the current District enrollment figures are pretty close to one another and each provide critical enrollment information to consider moving forward.

Revised: 7	/2012 (2011	Enrollme	nts)	Ρ	repared by	Enro the Pennsy	llment Proj Ivania Dep (717) 787-2	ections artment of 2644	Education					
					Blackha	wk SD				1-27-0	4-160-3			
YEAR	K	1	2	3	4	5	6	_7	8	9	10	11	12	Total
2007-2008	174	149	221	188	210	184	217	224	204	217	231	240	229	2688
2008-2009	179	182	150	221	190	197	178	218	225	216	213	213	231	2613
2009-2010	165	177	189	156	220	189	205	183	217	243	205	197	211	2557
2010-2011	171	173	183	189	154	220	191	217	180	221	223	201	192	2515
2011-2012	148	170	164	187	192	156	219	191	215	180	226	205	206	2459
					P	ROJE	сті	ONS						
2012-2013	182	180	171	167	187	194	157	224	190	223	174	208	203	2460
2013-2014	189	191	181	174	167	189	195	161	223	197	216	160	206	2449
2014-2015	190	199	192	184	174	169	190	199	160	232	191	199	158	2437
2015-2016	164	200	200	195	184	176	170	194	198	166	225	176	197	2445
2016-2017	165	173	201	203	195	186	177	174	193	206	161	207	174	2415
2017-2018	187	174	174	204	203	108	197	191	173	201	100	149	205	2414
2010 2010	189	175	175	177	200	208	100	101	100	100	105	102	148	2970
2010-2018	100	175	175		204	200	199	191	100	100	190	103	140	2378
2019-2020	169	176	178	178	177	207	207	204	190	187	174	180	181	2406
2020-2021	170	178	177	179	178	179	208	212	203	197	181	160	178	2400
2021-2022	171	179	179	180	179	180	180	213	211	211	191	167	158	2399

	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
2011-2012	861	1017	1236	1427	1642	1822	2459	781	625	406	805	586	1223	1032	817	637
2016-2017	937	1123	1300	1474	1667	1873	2415	730	544	367	750	573	1115	941	748	542
2021-2022	888	1068	1248	1461	1672	1883	2399	784	604	424	815	635	1151	938	727	516
2011-2012 to	2021-202	22														
Change	27	51	12	34	30	61	-60	3	-21	18	10	49	-72	-94	-90	-121
Percent	3.1	5.0	1.0	2.4	1.8	3.3	-2.4	0.4	-3.4	4.4	1.2	8.4	-5.9	-9.1	-11.0	-19.0



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Current Enrollments as of May, 2015:

Date: 0 Time:1	05/18/2015 3:50:48					2014-	2015 Bla Enr Report I	ckhawk S oliment T Date: 05/1	chool Dist ally 8/2015	riet					En	Page: 1 rollTally v1.0.3
Schoo	Ha L O	lf F	iuli 0	1	2	3	4	5	6	7	8	9	10	11	12	School Total
010麗	NORTHWESTERN	PRIMA	RY													
	Male		53	55	51											159
	Female		53	56	56											165
	Total:		106	111	107											324
020	PATTERSON PRIM	ARY														
	Male		28	33	39											100
	Female		39	41	44											124
	Total:		67	74	83									- A S 173		224
030	BLACKHAWK INTI	ERMED	IATE													
	Male		10		1	77	90	92								270
	Female		4			86	91	86								267
	Total:		14		1	163	181	178								537
031	pre-K INTERMED Male Female															0
	Total,							and the same states of								U .
050	HIGHLAND MIDDL Male Female Total:	E.							101 97	99 93	81 74					281 264 545
090	DI ACKHAWK HICH								170	172	155					545
000	Male Female											123 107	100 88	90 109	69 97	382 401
	I Otal:											230	188	199	166	783
090	Blackhawk OSP Male Female		5			5		2	2	2 1	1	3	2	1 3	9 5	30 11
	Total:		5			5		2	2	3	1	3	2	4	14	41
115	MGMH Male Female Total:															0 0 0



Section 2 – Educational Overview

Section 2 includes the overview of the District's educational program. The following document is provided by the school administration for use in this study. The document describes the educational programming for all grades K-12. Anticipated instructional practices and planned curriculums are described. Finally, the document will outline any facility needs or deficiencies that are needed to support the desired educational program. For questions regarding this document, please contact Dr. Melanie Kerber, Superintendent of Blackhawk School District.



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BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY SECTION 2 – EDUCATIONAL OVERVIEW Page 1

Blackhawk SD **District Level Plan** 07/01/2015 - 06/30/2018

District Profile

Demographics

500 Blackhawk Rd Beaver Falls, PA 15010 (724)846-6600 Superintendent: Michelle Miller Director of Special Education: Korin McMillen

Planning Process

The process to complete this plan is one that is cooperative and inclusive of many stakeholders throughout the process. The development of this plan will be accomplished by the following:

- 1. Survey Staff
- 2. Administrative Review and Create Rough Draft
- 3. Curriculum Development Council Reviews all plans and provides input
- 4. Smaller focus committees will review the work of the six sections

Mission Statement

Blackhawk School District is dedicated to providing all students a rigorous learning environment in order to be highly successful and competitive in the global community.

Vision Statement

The District will be the leader in providing a world class education.

Shared Values

We believe that:

- 1. Each person has value and is worthy of respect.
- 2. A positive and safe environment is necessary for learning to occur.
- 3. All stakeholders (students, staff, administrators and community members) are accountable for the success of our students in the global community.

- 4. We must provide relevant and meaningful learning experiences to meet each student's individual needs: academically, socially, emotionally and physically.
- 5. Rigor, relevance and relationships must be the focus of all programs, learning opportunities and curricular materials.
- 6. Curriculum must be aligned, written, taught and tested.
- 7. Technology is an integrated part of all educational experiences.
- 8. All students, staff and educational leaders are responsible for becoming life long learners.
- 9. The district is dedicated to creating a collaborative culture in which all stakeholders' ideas are valued.
- 10. All employees will present themselves as professional and ethical leaders who share the district's vision, mission, and goals.

Educational Community

Our district is located in the northwestern part of <u>Beaver County</u>, Pennsylvania. It encompasses the communities of <u>Chippewa Township</u>, <u>Darlington Borough</u>, Darlington Township, Enon Valley Borough, (<u>Lawrence County</u>), <u>Patterson Heights</u>, <u>Patterson Township</u>, <u>South Beaver Township</u> and West Mayfield Borough. Over 17,000 people live in the 65 square miles of the district.

Blackhawk School District is suburban and rural in nature. It is located close to the Pennsylvania Turnpike (Exit 1A and Exit 2) and the Beaver Valley Expressway (Route 376) which is a direct route to the Pittsburgh International Airport and the city of Pittsburgh. Because Beaver County is situated between Pittsburgh and Youngstown, Ohio, county residents can easily avail themselves of the cultural opportunities found in larger cities, while residing in a small community atmosphere.

Within the District's boundaries are numerous retail shops, banks, restaurants, medical professionals, places of worship, and just 11 miles to the south is Beaver Valley Mall which houses additional retail stores and dining locations. Blackhawk is also a safe District to reside in with stellar local police departments and fire departments on call at all times.

When it comes to educational opportunities, Blackhawk is a leader. Blackhawk offers countless programs and services to students including:

- Programs for Academically Gifted
- Active Parent Teacher Organization (PTO)

- Special Education Programs and Services
- Life Skills and Autistic Support Programming
- Instructional Support Services
- School Psychological Services
- Continuous Staff Professional Development Program
- Music Academy Course Offerings Grades 9-12
- Extra Curricular Activities for Students Grades 6-12
- Olweus Bullying Prevention Program Grades K-12
- Computer, Art, Music, Physical Education Programs
- Student Health Services
- Computer Labs
- Technologically Rich Classrooms
- Exploratory Middle School Programs
- Field Trip Opportunities
- Pre-K Programs
- Over 15 AP Courses
- Transportation Services
- Cafeteria Services
- Counseling Services

Blackhawk also leads the pack with a large athletic program. Blackhawk boasts a total of 45 teams for boys and girls in grades 7-12. Blackhawk Cougar athletes are always in the spotlight, capturing 124 sectional titles, 29 WPIAL (regional) titles, and 6 PIAA (state) championships.

Facilities include: 2 primary schools (K-2) 1 intermediate school (3-5) 1 middle school (6-8) 1 high school (9-12)

Planning Committee

Name	Role				
Alan Andrascik	Business Representative				
Kim Baker	Parent				
Clint Berchtold	Community Representative				
Nancy Bowman	Student Curriculum Director/Specialist				
Karla Campagna	Elementary School Teacher - Regular Education				
Sprinker Carol	Administrator				
Amy Cienkowski	Elementary School Teacher - Regular Education				
Michelle Daniels	Elementary School Teacher - Regular Education				
Debbie Daquila	Secondary School Teacher - Regular Education				
Jessica Doughherty	Elementary School Teacher - Regular Education				
Becky Effert	Elementary School Teacher - Regular Education				
Christina Ford	Parent				
JaneAnn Fucci	Administrator				
Ryan Hardesty	Middle School Teacher - Regular Education				
Andy Hedrick	Administrator				
Gina Lansberry	Elementary School Teacher - Regular Education				
Nathan Lowery	Secondary School Teacher - Regular Education				
LuAnne Maginness	Elementary School Teacher - Regular Education				
Korin McMillen	Special Education Director/Specialist				
Carol McMillen	Elementary School Teacher - Regular Education				
Matt Merulli	Elementary School Teacher - Regular Education				
Michelle Miller	Administrator				
Anthony Mooney	Administrator				
Scott Nelson	Administrator				
Meredith Oliver	Elementary School Teacher - Regular Education				
Rich Oswald	Board Member				
Mark Papa	Business Representative				
Heather Pastor	Elementary School Teacher - Regular Education				
Heather Ream	Middle School Teacher - Regular Education				
Ryan Ricciardi	Secondary School Teacher - Regular Education				
Sarah Shuleski	Middle School Teacher - Regular Education				
Jared Slimm	Middle School Teacher - Regular Education				
Heather Stein	Elementary School Teacher - Special Education				
Mark Taylor	Community Representative				
Deb Theilman	Secondary School Teacher - Regular Education				
Lisa Thomas-Wright	Elementary School Teacher - Regular Education				
Mrs. Thompson	Parent				

Joy Winters	Secondary School Teacher - Regular Education

Core Foundations

Standards

Mapping and Alignment

Elementary Education-Primary Level

Standards	Mapping	Alignment
Arts and Humanities	Accomplished	Accomplished
Career Education and Work	Accomplished	Accomplished
Civics and Government	Developing	Developing
Common Core Standards: English Language Arts	Accomplished	Accomplished
Common Core Standards: Literacy in History/Social Studies, Science and Technical Subjects	Developing	Developing
Common Core Standards: Mathematics	Accomplished	Accomplished
Economics	Non Existent	Non Existent
Environment and Ecology	Non Existent	Non Existent
Family and Consumer Sciences	Non Existent	Non Existent
Geography	Developing	Developing
Health, Safety and Physical Education	Accomplished	Accomplished
History	Developing	Developing
Science and Technology and Engineering Education	Developing	Developing
Alternate Academic Content Standards for Math	Non Existent	Non Existent
Alternate Academic Content Standards for Reading	Non Existent	Non Existent
American School Counselor Association for Students	Developing	Developing
Early Childhood Education: Infant- Toddler→Second Grade	Developing	Developing
English Language Proficiency	Non Existent	Non Existent
Interpersonal Skills	Accomplished	Accomplished
School Climate	Accomplished	Accomplished

Explanation for standard areas checked "Needs Improvement" or "Non Existent":

Those identified as Non Existent are not taught at Primary Level. English Language Learners are serviced by the BVIU and the District adapts the District approved curriculum rather than implementing alternate academic content standards.

Elementary Education-Intermediate Level

Standards	Mapping	Alignment
Arts and Humanities	Accomplished	Accomplished
Career Education and Work	Accomplished	Accomplished
Civics and Government	Developing	Developing

Common Core Standards: English Language Arts	Accomplished	Accomplished
Common Core Standards: Literacy in History/Social Studies, Science and Technical Subjects	Developing	Developing
Common Core Standards: Mathematics	Accomplished	Accomplished
Economics	Developing	Developing
Environment and Ecology	Developing	Developing
Family and Consumer Sciences	Non Existent	Non Existent
Geography	Developing	Developing
Health, Safety and Physical Education	Accomplished	Accomplished
History	Developing	Developing
Science and Technology and Engineering Education	Developing	Developing
Alternate Academic Content Standards for Math	Non Existent	Non Existent
Alternate Academic Content Standards for Reading	Non Existent	Non Existent
American School Counselor Association for Students	Accomplished	Accomplished
English Language Proficiency	Non Existent	Non Existent
Interpersonal Skills	Accomplished	Accomplished
School Climate	Accomplished	Accomplished

Explanation for standard areas checked "Needs Improvement" or "Non Existent":

Those identified as Non Existent are not taught at Intermediate Level. English Language Learners are serviced by the BVIU and the District adapts the District approved curriculum rather than implementing alternate academic content standards.

Middle Level

Standards	Mapping	Alignment		
Arts and Humanities	Accomplished	Accomplished		
Career Education and Work	Accomplished	Accomplished		
Civics and Government	Accomplished	Accomplished		
Common Core Standards: English Language Arts	Accomplished	Accomplished		
Common Core Standards: Literacy in History/Social Studies, Science and Technical Subjects	Accomplished	Accomplished		
Common Core Standards: Mathematics	Accomplished	Accomplished		
Economics	Accomplished	Accomplished		
Environment and Ecology	Accomplished	Accomplished		
Family and Consumer Sciences	Accomplished	Accomplished		
Geography	Accomplished	Accomplished		
Health, Safety and Physical Education	Accomplished	Accomplished		
History	Accomplished	Accomplished		
Science and Technology and Engineering Education	Accomplished	Accomplished		
Alternate Academic Content Standards for Math	Non Existent	Non Existent		
Alternate Academic Content Standards for Reading	Non Existent	Non Existent		
American School Counselor Association for Students	Accomplished	Accomplished		
English Language Proficiency	Non Existent	Non Existent		

Interpersonal Skills	Accomplished	Accomplished
School Climate	Accomplished	Accomplished
World Language	Accomplished	Accomplished

Explanation for standard areas checked "Needs Improvement" or "Non Existent":

Those identified as Non Existent are not taught at Middle Level. English Language Learners are serviced by the BVIU and the District adapts the District approved curriculum rather than implementing alternate academic content standards.

High School Level

Standards	Mapping	Alignment	
Arts and Humanities.	Accomplicated	Accomplished	
Career Education and Work	Accomplished	Accomplished	
Covies and Cove mment	Accomplished	Accomplished	
Common Core Standards: English Language Arts	Accomplished	Accomplished	
Common Core Standards Literacy in History/Social- Studies Science and Technical Subjects	Accomplished	Accomplished	
Common Core Standards: Mathematics	Accomplished	Accomplished	
Economics	Accomplished	- Accomplising	
Environment and Ecology	Accomplished	Accomplished	
Family and Consumer Sciences	Accomplished	Accomplished	
Geography	Accomplished	Accomplished	
Health Safety and Physical Education	Accomplished	Accomilished	
History	Accomplished	Accomplished	
Science and rectinology and angineering Education	: Accomplished	Accomplished	
Alternate Academic Content Standards for Math	Non Existent	Non Existent	
Alternate Academic Content Standards for Reading	Non Existent	NonExistent	
American School Counselor Association for Students	Accomplished	Accomplished	
English Language Proficiency	Non System	Non Existent	
Interpersonal Skills	Accomplished	Accomplished	
School Climate	Accomplished	Accomplished	
World Language	Accomplished	Accomplished	

Explanation for standard areas checked "Needs Improvement" or "Non Existent":

Those identified as Non Existent are not taught at High School Level. English Language Learners are serviced by the BVIU and the District adapts the District approved curriculum rather than implementing alternate academic content standards.

Adaptations

Elementary Education-Primary Level

- Arts and Humanities
- Career Education and Work
- Civics and Government

- Common Core Standards: English Language Arts
- Common Core Standards: Literacy in History/Social Studies, Science and Technical Subjects
- Common Core Standards: Mathematics
- Environment and Ecology
- Geography
- Health, Safety and Physical Education

Elementary Education-Intermediate Level

- Arts and Humanities
- Career Education and Work
- Civics and Government
- Common Core Standards: English Language Arts
- Common Core Standards: Literacy in History/Social Studies, Science and Technical Subjects
- Common Core Standards: Mathematics
- Environment and Ecology
- Geography
- Health, Safety and Physical Education
- History
- Science and Technology and Engineering Education

Middle Level

- Arts and Humanities
- Career Education and Work
- Civics and Government
- Common Core Standards: English Language Arts
- Common Core Standards: Literacy in History/Social Studies, Science and Technical Subjects
- Common Core Standards: Mathematics
- Economics
- Environment and Ecology
- Family and Consumer Sciences
- Geography
- Health, Safety and Physical Education
- History
- Science and Technology and Engineering Education

High School Level

- Arts and Humanities
- Career Education and Work
- Civics and Government
- Common Core Standards: English Language Arts
- Common Core Standards: Literacy in History/Social Studies, Science and Technical Subjects
- Common Core Standards: Mathematics
- Economics

- Environment and Ecology
- Family and Consumer Sciences
- Geography
- Health, Safety and Physical Education
- History
- Science and Technology and Engineering Education

Explanation for any standards checked:

The District's curriculum is aligned to the PA Standards or the PA Core standards. In each grade level or course, the curriculum has been expanded to increase the fundamental skills but also additional skills that are valued in our District.

Curriculum

Planned Instruction

Elementary Education-Primary Level

Curriculum Characteristics	Status	
Objectives of planned courses, instructional units or interdisciplinary studies to be achieved by all students are identified for each subject area.	Accomplished	
Content, including materials and activities and estimated instructional time to be devoted to achieving the academic standards are identified.	Accomplished	
The relationship between the objectives of a planned course, instructional unit or interdisciplinary studies and academic standards are identified.	Accomplished	
Procedures for measurement of mastery of the objectives of a planned course, instructional unit or interdisciplinary studies are identified.	Developing	

Processes used to ensure Accomplishment:

Specific types of measurement are not included in curriculum documents but are identified consistently. All curriculum is online and reviewed annually.

Explanation for any standards areas checked "Needs Improvement" or "Non Existent". How the LEA plans to address their incorporation:

N/A

Elementary Education-Intermediate Level

Curriculum Characteristics	Status
Objectives of planned courses, instructional units or interdisciplinary, studies to be achieved by all students are identified for each subject area.	Accomplished
Content, including materials and activities and estimated instructional time to be devoted to achieving the academic standards are identified.	Accomplished
The relationship between the objectives of a planned course	Accomplished

instructional unit or interdisciplinary studies and academic standards are identified.	
Procedures for measurement of mastery of the objectives of a planned course, instructional unit or interdisciplinary studies are identified.	Developing

Processes used to ensure Accomplishment:

Specific types of measurement are not included in curriculum documents but are identified consistently. All curriculum is online and reviewed annually.

Explanation for any standards areas checked "Needs Improvement" or "Non Existent". How the LEA plans to address their incorporation:

N/A

Middle Level

Curriculum Characteristics	Status
Objectives of planned courses, instructional units or interdisciplinary studies to be achieved by all students are identified for each subject area.	Accomplished
Content, including materials and activities and estimated instructional time to be devoted to achieving the academic standards are identified.	Accomplished
The relationship between the objectives of a planned course, instructional unit or interdisciplinary-studies and academic standards are identified.	Accomplished
Procedures for measurement of mastery of the objectives of a planned course, instructional unit or interdisciplinary studies are identified.	Developing

Processes used to ensure Accomplishment:

Specific types of measurement are not included in curriculum documents but are identified consistently. All curriculum is online and reviewed annually.

Explanation for any standards areas checked "Needs Improvement" or "Non Existent". How the LEA plans to address their incorporation:

N/A

High School Level

Curriculum Characteristics	Status	
Objectives of planned courses, instructional units of interdisciplinary studies to be achieved by all students are identified for each subject area.	Accomplished	
Content, including materials and activities and estimated instructional time to be devoted to achieving the academic standards are identified.	Accomplished	
The relationship between the objectives of a planned course, instructional unit or interdisciplinary studies and academic standards are identified.	Accomplished	
Procedures for measurement of mastery of the objectives of a planned	Developing	

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course. Instructional unit	or interdisciplinary studies are identified	
		·

Processes used to ensure Accomplishment:

Specific types of measurement are not included in curriculum documents but are identified consistently. All curriculum is online and reviewed annually.

Explanation for any standards areas checked "Needs Improvement" or "Non Existent". How the LEA plans to address their incorporation:

N/A

Modification and Accommodations

Explain how planned instruction contains modifications and accommodations that allow all students at all mental and physical ability levels to access and master a rigorous standards aligned curriculum.

We provide learning support, life skills, and an academic enrichment support to make adaptations or to enrich the curriculum. We have a variety of resources for struggling students, whether they are identified with a learning disability or not. Teachers are well versed in Differentiated Instruction, so lessons can be tiered when there are diverse needs in the classroom.

Instruction

Instructional Strategies

- Formal classroom observations focused on instruction
- Walkthroughs targeted on instruction
- Annual Instructional evaluations
- Peer evaluation/coaching
- Instructional Coaching

Regular Lesson Plan Review

• Administrators

Provide brief explanation of LEA's process for incorporating selected strategies.

The District is committed to implementing Danielson's Framework which embeds opportunity for Differentiated Supervision and the Teacher Effectiveness Model. All of the selected strategies are embedded within the District approved supervision model and supported by PDE regulations.

Provide brief explanation for strategies not selected and how the LEA plans to address their incorporation.

Responsiveness to Student Needs

Elementary Education-Primary Level

Instructional Practices	Status
Structured grouping practices are used to meet student needs.	Implemented in 50% or more of district classrooms
Flexible instructional time or other schedule-related practices are used to meet student needs.	Implemented in 50% or more of district classrooms
Differentiated instruction is used to meet student needs.	Implemented in 50% or more of district classrooms
A variety of practices that may include structured grouping, flexible scheduling and differentiated instruction are used to meet the needs of gifted students.	Implemented in 50% or more of district classrooms

If necessary, provide further explanation. (Required explanation if column selected was

This narrative is empty.

Elementary Education-Intermediate Level

Instructional Practices	Status
Structured grouping practices are used to meet student needs.	Implemented in 50% or more of district classrooms
Flexible instructional time or other schedule-related practices are used to meet student needs.	Implemented in 50% or more of district classrooms
Differentiated instruction is used to meet student needs.	Implemented in 50% or more of district classrooms
A variety of practices that may include structured grouping, flexible scheduling and differentiated instruction are used to meet the needs of gifted students.	Implemented in 50% or more of district classrooms

If necessary, provide further explanation. (Required explanation if column selected was

This narrative is empty.

Middle Level

Instructional Practices	Status	
Structured grouping practices are used to meet student needs.	Implemented in 50% or more of district classrooms	
Flexible instructional time or other schedule-related practices are used to meet student needs.	Implemented in 50% or more of district classrooms	
Differentiated instruction is used to meet student needs.	Implemented in 50% or more of district classrooms	
A variety of practices that may include structured grouping, flexible scheduling and differentiated instruction are used to meet the needs of gifted students.	Implemented in 50% or more of district classrooms	

If necessary, provide further explanation. (Required explanation if column selected was

This narrative is empty.

High School Level

Instructional Practices	Status
Structured grouping practices are used to meet student needs.	Implemented in 50% or more of district classrooms
Flexible instructional time or other schedule-related practices are used to meet student needs.	Implemented in less than 50% of district classrooms
Differentiated instruction is used to meet student needs,	Implemented in 50% or more of district classrooms
A variety of practices that may include structured grouping, flexible scheduling and differentiated instruction are used to meet the needs of gifted students.	Implemented in 50% or more of district classrooms

If necessary, provide further explanation. (Required explanation if column selected was

Due to high school schedule, students are placed in appropriate classes and adjustments to individual learning levels are made throughout the year. Resource rooms are utilized but the structure of the high school schedule inhibits maximum flexibility.

Recruitment

Describe the process you implement to recruit and assign the most effective and highly qualified teachers in order to meet the learning needs of students who are below proficiency or are at risk of not graduating.

All of the teachers at Blackhawk are highly qualified and all teachers support students who are at-risk. In carrying out the "hire the best" philosphy, the District adheres to the guidelines in the Blackhawk "Recruitment and Selection" manual.

Assessments

Course Completion	SY 13- 14	SY 14- 15	SY 15- 16	SY 16- 17	SY 17- 18	SY 18- 19
Total Courses	25.00	25.00	25.00	26.00	26.00	26.00
English	4.00	4.00	4.00	4.00	4.00	4.00
Mathematics	4.00	4.00	400	400	4.00	4.00
Social Studies	4.00	4.00	4.00	4.00	4.00	4.00
Science	300	- 800 -	3.00	300	£.00	3.00
Physical Education	1.00	1.00	1.00	1.00	1.00	1.00
Health	1:00	1,00	1,00	1.00	1.00	1.00
Music, Art, Family & Consumer Sciences, Career and Technical Education	4.00	4.00	4.00	4.00	4.00	4.00
Electives	4.00	4.00	4.00	500	5.00	500
Minimum % Grade Required for Credit (Numerical Answer)	65.00	65.00	65.00	65.00	65.00	65.00

Local Graduation Requirements

2014 Graduation Specifics

Identify the method(s) used for determining graduation proficiency for the following sets of standards. (Check all that apply)

Reading

• Proficiency on State Assessments

Writing

• Proficiency on State Assessments

Mathematics

• Proficiency on State Assessments

Local Assessments

Standards	WA	TD	NAT	DA	PSW	Other
Arts and Humanities	X	X	A. Care		1001218	
Career Education and Work						X
Civics and Government		X			1 Starte	
Common Core Standards: English Language Arts		х		x		x
Common Core Standards: Literacy in History/Social Studies, Science and Technical Subjects		x				
Common Core Standards: Mathematics						
Economics		X	國家自由	X		X
Environment and Ecology		X				
Family and Consumer Sciences		X	SHEER'S	X		X
Geography		X				
Health, Safety and Physical Education	X	x				
History		X			1	
Science and Technology and Engineering Education		x				
World Language		X				

2015 and beyond Graduation Requirement Specifics

Identify the method(s) used for determining graduation proficiency for the following sets of standards. (Check all that apply)

English Language and Composition

- Completion of Course Work in which a student demonstrates proficiency on the associated Keystone Exam
- Students are allowed to test out of required courses.
- Successfully complete Advanced Placement or Independent Baccalaureate Courses including "passing" a course exam.

English Literature

- Completion of Course Work in which a student demonstrates proficiency on the associated Keystone Exam
- Students are allowed to test out of required courses.

• Successfully complete Advanced Placement or Independent Baccalaureate Courses including "passing" a course exam.

Mathematics

- Completion of Course Work in which a student demonstrates proficiency on the associated Keystone Exam
- Students are allowed to test out of required courses.
- Successfully complete Advanced Placement or Independent Baccalaureate Courses including "passing" a course exam.

Science & Technology

- Completion of Course Work in which a student demonstrates proficiency on the associated Keystone Exam
- Students are allowed to test out of required courses.
- Successfully complete Advanced Placement or Independent Baccalaureate Courses including "passing" a course exam.

Environment & Ecology

- Completion of Course Work in which a student demonstrates proficiency on the associated Keystone Exam
- Students are allowed to test out of required courses.
- Successfully complete Advanced Placement or Independent Baccalaureate Courses including "passing" a course exam.

2017 and beyond Graduation Requirement Specifics

Identify the method(s) used for determining graduation proficiency for the following sets of standards. (Check all that apply)

Biology or Chemistry

No methods have been identified for this standard.

American History, Civics/Government, or World History

- Completion of Course Work in which a student demonstrates proficiency on the associated Keystone Exam
- Students are allowed to test out of required courses.
- Successfully complete Advanced Placement or Independent Baccalaureate Courses including "passing" a course exam.

-

Methods and Measures

Summative Assessments

Summative Assessments	EEP	EEI	ML	HS
PSSA-End of Unit Exam		X		
Keystones			X	X
Midterms			X	X
Finals			X	X
PSSA	$\mathbb{D}_{2^{n-1}}^{+}$		X	14 Post 14

Benchmark Assessments

Benchmark Assessments	EEP	EEI	ML	HS
Math Fast Facts	2 ÷	2		
BAS Reading Assessment	X			

Formative Assessments

Formative Assessments		EEI	ML	HS
ARtests	2 4	X ·		

Diagnostic Assessments

Diagnostic Assessments	EEP	EEI	ML	HS
Dibels	X			
CDT		Х	X	X

Validation of Implemented Assessments

Validation Methods	EEP	EEI	ML	HS
External Review			Sec.	
Intermediate Unit Review				
LEA Administration Review	X	X	X	X
Building Supervisor Review			57	
Department Supervisor Review				
Professional Learning Community Review	X	X	X	X
Instructional Coach Review				
Teacher Peer Review	X	X	X	X

Provide brief explanation of your process for reviewing assessments.

Assessment data is reviewed by administration and staff on an ongoing basis. Formative and Diagnostic assessments are used to group students for instruction. CBAs (Curriculum
Based Assessments) at the middle and high school are continually reviewed and aligned to the format and level of rigor on Summative Assessments. Assessments are reviewed in Department meetings, grade level meetings, PLCs, and in faculty professional development.

Development and Validation of Local Assessments

If applicable, explain your procedures for developing locally administered assessments and how they are independently and objectively validated every six years.

N/A

Collection and Dissemination

Describe your system to collect, analyze and disseminate assessment data efficiently and effectively for use by LEA leaders and instructional teams.

Data is disseminated from either District or Building leadership. Using Harvard's Data Wise process, Data Teams identify critical data that peers need, the way to most effectively present data, and the leading questions to analyze data.

Of the assessments, many of the test results are electronic (i.e. Dibels, BAS, CDTs, Keystones, PSSAs). This aids in data analysis.

Each building principal utilizes professional development opportunities to support data analysis. This is accomplished during in-service days, 2 hour professional development days, Act 80 days, grade level meetings, team meetings and/or department meetings.

Data Informed Instruction

Describe how information from the assessments is used to assist students who have not demonstrated achievement of the academic standards at a proficient level or higher.

Based on data analysis, those students who are not performing at grade level or at proficient level receive one or more of the following interventions:

- 1. Differentiated Instruction at classroom level;
- 2. IST at grades K-5;
- 3. SAP at grades K-12;
- 4. Child Find at grades K-12;
- 5. PLC meetings focused on student achievement;
- 6. Data Wise meetings to analyze data;
- 7. Pre-tests/screenings for grouping or course selection;

Assessment Data Uses

Assessment Data Uses	EEP	EEI	ML	HS
Assessment results are reported out by PA	X	X	A X E	X

assessment anchor or standards-aligned learning objective.				
Instructional practices are identified that are linked to student success in mastering specific PA assessment anchors, eligible content or standards-aligned learning objectives.	x	х	x	x
Specific PA assessment anchors, eligible content or standards-aligned learning objectives are identified for those students who did not demonstrate sufficient mastery so that teachers can collaboratively create and/or identify instructional strategies likely to increase mastery.	X	x	X	x
Instructional practices modified or adapted to increase student mastery.	х	х	x	x

Provide brief explanation of the process for incorporating selected strategies.

Assessment data is analyzed and the following strategies are implemented:

- 1. Guided Reading in K-5;
- 2. Daily 5 in grades K-5;
- 3. Title I Strategic Intervention in grades K-2;
- 4. Special Education in grades K-12;
- 5. Gifted Education in grades K-12 for identified and "high fliers";
- 6. Interdisciplinary Units;
- 7. Course selection/placement;

Provide brief explanation for strategies not selected and how you plan to address their incorporation.

N/A

Distribution of Summative Assessment Results

Distribution Methods	EEP	EEI	ML	HS
Course, Planning Guides	X	X	X	X.
Directing Public to the PDE & AYP or other Test- related Websites				
Individual Meetings	X	X	X	X
Letters to Parents/Guardians	X	X	X	X
Local Media Reports				
Website	X	X	X	X
Meetings with Community, Families and School Board	X	X	X	X
Mass Phone Calls/Emails/Letters	X	X	X	X
Newsletters	X	X	X	X
Press Releases				
School Calendar				
Student Handbook				

Provide brief explanation of the process for incorporating selected strategies.

The District adheres to a multi-faceted approach to inform all stakeholders or summative assessment results. This has been quite successful in communicating with the various stakeholders.

Provide brief explanation for strategies not selected and how the LEA plans to address their incorporation.

The District will post the PA Profile link to the District website and continue to post academic achievement summaries on the website. The District will consider contacting local media regarding assessment results although the Beaver County Times usually runs stories comparing Beaver County schools. The District will most likely not include assessment results on the calendar since it is only available online. Consideration can be given as to whether this information is included in the student handbooks.

Safe and Supportive Schools

Assisting Struggling Schools

Describe your entity's process for assisting schools that either do not meet the annual student achievement targets or experience other challenges, which deter student attainment of academic standards at a proficient level or higher.

If your entity has no struggling schools, explain how you will demonstrate continued growth in student achievement.

Blackhawk School District is committed to increasing the academic achievement of every student. To do so, the administration and staff use the Data Wise process to analyze school and student data. The administration focuses closely on instruction by leading professional development, spearheading teacher evaluation process including differentiated supervision, and supports instructional initiatives that will support achievement.

Programs, Strategies and Actions	EEP	EEI	ML	HS
Biennially Updated and Executed Memorandum of Understanding with Local Law Enforcement	- X	Ż.	, X	X.
School-wide Positive Behavioral Programs	X	Х	X	Х
Conflict Resolution or Dispute Management				
Peer Helper Programs	X	Х	X	X
Safety and Violence Prevention Curricula	X	X	X.X	X
Student Codes of Conduct	Х	Х	Х	X
Comprehensive School Safety and Violence	X.	X	- <u>S</u> X	X

Programs, Strategies and Actions

Prevention Plans.				
Purchase of Security-related Technology	Х	Х	X	Х
Student, Staff and Visitor Identification Systems	X	X	X	X
Placement of School Resource Officers				
Sudent Assistance Program Teams and Training	$\overline{\mathbf{x}}$	\mathbf{z} .	<u> </u>	Σ
Counseling Services Available for all Students	Х	X	Х	Х
Internet Web-based System for the Management of				
Student Discipline				4. 1

Explanation of strategies not selected and how the LEA plans to address their incorporation:

Conflict resolution is embedded in our Olweus program. We will continue to teach these skills through Olweus. The District utilizes ProSoft system to manage student discipline but this is not web-based software. We are pleased with this multi-faceted program. The District does not have School Resource Officers. We have trained staff to address potential situations and we are upgrading the security of our facilities.

Identifying Gifted Students

Describe your entity's process for identifying gifted children.

This narrative is empty.

Developmental Services	EEP	EEI	ML	HS
Academic Counseling	X	X	X	X
Attendance Monitoring	X	X	X	X
Behavior Management Programs	X	X	X	X
Bullying Prevention	X	X	X	X
Career Awareness	X	X -	X	X
Career Development/Planning	X	X	X	X
Coaching/Mentoring		X	X	X
Compliance with Health Requirements –i.e., Immunization	x	х	x	x
Emergency and Disaster Preparedness	x	X	X	X
Guidance Curriculum	X	X	X	X
Health and Wellness Curriculum	X	X	X	X
Health Screenings	X	X	X	X
Individual Student Planning	X	X	X	X
Nutrition	X	X	X	X
Orientation/Transition	X	X	X	X
RtII				
Wellness/Health Appraisal				

Developmental Services

Explanation of developmental services:

NA

Diagnostic, Intervention and Referral Services

Diagnostic, Intervention and Referral Services	EEP	EEI	ML	HS
Accommodations and Modifications	Σ	→X	X	- X
Administration of Medication	Х	Х	X	Х
Assessment of Academic Skills/Aptitude for Learning	X	Ξ. Ž	Σ	<u>k</u>
Assessment/Progress Monitoring	X	X	X	X
Casework	Σ	$-\hat{\Sigma}$:	$\tilde{\Sigma}$	$\tilde{\Sigma}$
Crisis Response/Management/Intervention	Х	X	X	X
Individual Counseling	\mathbf{X}	Σ	- <u>\$</u>	· . 🖸
Intervention for Actual or Potential Health Problems	Х	X	Х	X
Placement into Appropriate Programs	. <u>X</u>	<u> </u>		<u>.</u>
Small Group Counseling-Coping with life situations	Х	X	Х	X
Small Group Counseling-Educational planning	Σ.	\cdot	Σ :	<u>.</u>
Small Group Counseling-Personal and Social Development	Х	Х	Х	х
Special Education Evaluation	<u>x</u>	<u> </u>	X	<u> </u>
Student Assistance Program	Х	Х	X	Х

Explanation of diagnostic, intervention and referral services:

NA

Consultation and Coordination Services

Consultation and Coordination Services	EEP	EEI	ML	HS
Alternative Education			X	X
Case and Care Management				
Community Liaison	$\sim 2^{-1}$	<u>X</u> .	а <u>Х</u>	<u>-</u>
Community Services Coordination (Internal or External)	X	Х	х	х
Coordinate Plans		X	X	X
Coordination with Families (Learning or Behavioral)	Х	X	Х	X
Home/Family Communication	X	. <u>- X</u>	X	·
Managing Chronic Health Problems	X	X	X	Х
Managing IEP and 504 Plans	<u>.</u>	X	\sim	X
Referral to Community Agencies	X	Х	Х	Х
Staff Development		<u> </u>	. <u>X</u>	$\cdot \Sigma$
Strengthening Relationships Between School Personnel, Parents and Communities	Х	х	х	х
System Support		<u>X</u>	Xis	X
Truancy Coordination	X	X	Х	Х

Explanation of consultation and coordination services:

NA

Communication of Educational Opportunities

Communication of Educational Opportunities	EEP	EEI	ML	HS
Course Planning Guides	X	X	X	X
Directing Public to the PDE & AYP Websites				
Individual Meetings	X	X	X	X
Letters to Parents/Guardians	X	X	X	X
Local Media Reports			Harts Hart	
Website	X	Х	X	X
Meetings with Community, Families and Board of Directors	X	x	X	x
Mass Phone Calls/Emails/Letters	X	X	X	X
Newsletters	X	X	X	X
Press Releases				
School Calendar	X	X	X	X
Student Handbook	X	Х	X	X

Communication of Student Health Needs

Communication of Student Health Needs	EEP	EEI	ML	HS
Individual Meetings	X	X	X	X
Individual Screening Results	X	X	X	X
Letters to Parents/Guardians	X	X	X	X
Website	X	X	X	X
Meetings with Community, Families and Board of Directors	x	X	X	x
Newsletters	X	X	X	X
School Calendar	X	X	X	X
Student Handbook	X	X	X	X

Frequency of Communication

Elementary Education - Primary Level

• More than once a month

Elementary Education - Intermediate Level

• More than once a month

Middle Level

• More than once a month

High School Level

• More than once a month

Collaboration for Interventions

Describe the collaboration between classroom teachers and individuals providing interventions regarding differing student needs and academic progress.

Collaboration occurs consistently among teachers and support staff by coordinating student instruction during the following:

- 1. PLCs;
- 2. Professional Development;
- 3. Title I planning meetings;
- 4. SAP Team meetings;
- 5. Co-planning meetings;
- 6. IEP meetings;
- 7. 504 planning meetings;
- 8. IST planning meetings;
- 9. Department meetings

Community Coordination

Describe how you accomplish coordination with community operated infant and toddler centers, as well as preschool early intervention programs. In addition, describe the community coordination with the following before or after school programs and services for all grade levels, including pre-kindergarten, if offered, through grade 12.

- 1. Child care
- 2. After school programs
- 3. Youth workforce development programs
- 4. Tutoring

Child care: The District provides bussing to child care facilities located within the District before and after school.

After school programs: The District provides an activity bus to assist students who participate in after school activities and need transportation to a specific school. Workforce development programs: The District does not have a program for all students but will support work experience for students with special needs. The District supports Community Based Instruction for our Life Skills program.

Tutoring: Tutoring is offered in grades K-12 with bussing provided for the Primary's summer school. The Intermediate Unit's Early Intervention Program and one of the county's Head Start classrooms is located in the district's buildings in addition to the District's own Pre-K classroom.

Preschool Agency Coordination

Explain how the LEA coordinates with agencies that serve preschool age children with disabilities.

- 1. Address coordination activities designed to identify and serve children with disabilities and the supports and accommodations available to ensure both physical and programmatic access.
- 2. Address pre-kindergarten programs operated directly by the LEA and those operated by community agencies under contract from the LEA.
- 3. Describe how the LEA provides for a smooth transition from the home setting and any early childhood care or educational setting the students attend, to the school setting.

1. Blackhawk supports all

Materials and Resources

Description of Materials and Resources

Elementary Education-Primary Level

Material and Resources Characteristics	Status
Aligned and supportive of academic standards, progresses level to level and demonstrates relationships among fundamental concepts and skills	Developing
A robust supply of high quality aligned instructional materials and resources available	Developing
Accessibility for students and teachers is effective and efficient	Developing
Differentiated and equitably allocated to accommodate diverse levels of student motivation, performance and educational needs	Developing

Provide explanation for processes used to ensure Accomplishment.

Because the District leadership and teachers are constantly revising and improving practices to better meet the needs of students, materials and resources will never fully reach "accomplished."

Explanation for any row checked "Needs Improvement" or "Non Existent". How the LEA plans to address their incorporation:

N/A

Elementary Education-Intermediate Level

Material and Resources Characteristics	Status
Aligned and supportive of academic standards, progresses level to level and demonstrates relationships among fundamental concepts and skills	Developing

A robust supply of high quality aligned instructional materials and resources available	Developing
Accessibility for students and teachers is effective and efficient	Developing
Differentiated and equitably allocated to accommodate diverse levels of student motivation, performance and educational needs	Developing

Provide explanation for processes used to ensure Accomplishment.

Because the District leadership and teachers are constantly revising and improving practices to better meet the needs of students, materials and resources will never fully reach "accomplished."

Explanation for any row checked "Needs Improvement" or "Non Existent". How the LEA plans to address their incorporation:

N/A

Middle Level

Material and Resources Characteristics	Status
Aligned and supportive of academic standards, progresses level to level and demonstrates relationships among fundamental concepts and skills	Developing
A robust supply of high quality aligned instructional materials and resources available	Developing
Accessibility for students and teachers is effective and efficients and efficients and efficients and the students and teachers is effective and efficients and the students and teachers is effective and efficients and the students are students and the students are	Developing
Differentiated and equitably allocated to accommodate diverse levels of student motivation, performance and educational needs	Developing

Provide explanation for processes used to ensure Accomplishment.

Because the District leadership and teachers are constantly revising and improving practices to better meet the needs of students, materials and resources will never fully reach "accomplished."

Explanation for any row checked "Needs Improvement" or "Non Existent". How the LEA plans to address their incorporation:

N/A

High School Level

Material and Resources Characteristics	Status
Aligned and supportive of academic standards, progresses level to level and demonstrates relationships among fundamental concepts and skills	Developing
A robust supply of high quality aligned instructional materials and resources available	Developing
Accessibility for students and teachers is effective and efficient	Developing
Differentiated and equitably allocated to accommodate diverse levels of	Developing

where all a set to be a different for the			
STUDENT MOTIVATION	nertormance and	educational needs	
Student mouvation,	perior mance and	cuucauonai necus	

Provide explanation for processes used to ensure Accomplishment.

Because the District leadership and teachers are constantly revising and improving practices to better meet the needs of students, materials and resources will never fully reach "accomplished."

Explanation for any row checked "Needs Improvement" or "Non Existent". How the LEA plans to address their incorporation:

N/A

SAS Incorporation

Elementary Education-Primary Level

Standards	Status
Arts and Humanities	Implemented in less than 50% of district classrooms
Career Education and Work	Implemented in less than 50% of district classrooms
Civics and Government	Implemented in less than 50% of district classrooms
Common Core Standards: English Language Arts	Implemented in less than 50% of district classrooms
Common Core Standards: Literacy in History/Social Studies, Science and Technical Subjects	Implemented in less than 50% of district classrooms
Common Core Standards: Mathematics	Implemented in less than 50% of district classrooms
Economics	Not Applicable
Environment and Ecology	Not Applicable
Family and Consumer Sciences	Not Applicable
Geography	Implemented in less than 50% of district classrooms

Health, Safety and Physical Education	Implemented in less than 50% of district classrooms
History	Implemented in less than 50% of district classrooms
Science and Technology and Engineering Education	Implemented in less than 50% of district classrooms
Alternate Academic Content Standards for Math	Not Applicable
Alternate Academic Content Standards for Reading	Not Applicable
American School Counselor Association for Students	Implemented in less than 50% of district classrooms
Early Childhood Education: Infant-Toddler→Second Grade	Not answered
English Language Proficiency	Not Applicable
Interpersonal Skills	Implemented in less than 50% of district classrooms
School Climate	Implemented in less than 50% of district classrooms

Further explanation for columns selected "

SAS is used when writing curriculum, analyzing CDT results, and as a resource for teachers. Although this has been introduced to all staff, we do not believe it is fully utilized by 100% of faculty. Additionally, anything marked as NA is not explicitly taught at this level.

Elementary Education-Intermediate Level

Standards	Status
Arts and Humanities	Implemented in Iess than 50% of district classrooms
Career Education and Work	Implemented in less than 50% of district classrooms
Civics and Government	Implemented in less than 50% of district classrooms
Common Core Standards: English Language Arts	Implemented in

	less than 50% of
	classrooms
	Implemented in
Common Core Standards: Literacy in History/Social Studies, Science and Tachnical Subjects	less than 50% of
Technical Subjects	classrooms
	Implemented in
Common Core Standards: Mathematics	district
	classrooms
	Implemented in Jess than 50% of
Economics	district
	classrooms
Environment and Ecology	less than 50% of
Environment and Ecology	district
Family and Consumer Sciences	Not Applicable
	Implemented in
Geography	less than 50% of
	classrooms
	Implemented in
Health, Safety and Physical Education	less than 50% of district
	classrooms
	Implemented in
History	district
	classrooms
	less than 50% of
Science and Technology and Engineering Education	district
Alternate Academic Content Standards for Math	Not Applicable
Alternate Academic Content Standards for Reading	Not Applicable
	Implemented in
American School Counselor Association for Students	less than 50% of
	classrooms
English Language Proficiency	Not Applicable
	Implemented in less than 50% of
Interpersonal Skills	district
	classrooms
School Climate	less than 50% of
	district

classrooms

Further explanation for columns selected "

SAS is used when writing curriculum, analyzing CDT results, and as a resource for teachers. Although this has been introduced to all staff, we do not believe it is fully utilized by 100% of faculty. Additionally, anything marked as NA is not explicitly taught at this level.

Middle Level

Standards	Status
Arts and Humanities	Implemented in less than 50% of district classrooms
Career Education and Work	Implemented in less than 50% of district classrooms
Civics and Government	Implemented in less than 50% of district classrooms
Common Core Standards: English Language Arts	Implemented in less than 50% of district classrooms
Common Core Standards: Literacy in History/Social Studies, Science and Technical Subjects	Implemented in less than 50% of district classrooms
Common Core Standards: Mathematics	Implemented in less than 50% of district classrooms
Economics	Implemented in less than 50% of district classrooms
Environment and Ecology	Implemented in less than 50% of district classrooms
Family and Consumer Sciences	Implemented in less than 50% of district classrooms
Geography	Implemented in less than 50% of district classrooms

Health, Safety and Physical Education	Implemented in less than 50% of district classrooms
History	Implemented in less than 50% of district classrooms
Science and Technology and Engineering Education	Implemented in less than 50% of district classrooms
Alternate Academic Content Standards for Math	Not Applicable
Alternate Academic Content Standards for Reading	Not Applicable
American School Counselor Association for Students	Implemented in less than 50% of district classrooms
English Language Proficiency	Not Applicable
Interpersonal Skills	Implemented in less than 50% of district classrooms
School Climate	Implemented in less than 50% of district classrooms
World Language	Implemented in less than 50% of district classrooms

Further explanation for columns selected "

SAS is used when writing curriculum, analyzing CDT results, and as a resource for teachers. Although this has been introduced to all staff, we do not believe it is fully utilized by 100% of faculty. Additionally, anything marked as NA is not explicitly taught at this level.

High School Level

Standards	Status
Arts and Humanities	Implemented in less than 50% of district classrooms
Career Education and Work	Implemented in less than 50% of district classrooms
Civics and Government	Implemented in less than 50% of

	district classrooms
Common Core Standards: English Language Arts	Implemented in less than 50% of district classrooms
Common Core Standards: Literacy in History/Social Studies, Science and Technical Subjects	Implemented in less than 50% of district classrooms
Common Core Standards: Mathematics	Implemented in less than 50% of district classrooms
Economics	Implemented in less than 50% of district classrooms
Environment and Ecology	Implemented in less than 50% of district classrooms
Family and Consumer Sciences	Implemented in less than 50% of district classrooms
Geography	Implemented in less than 50% of district classrooms
Health, Safety and Physical Education	Implemented in less than 50% of district classrooms
History	Implemented in less than 50% of district classrooms
Science and Technology and Engineering Education	Implemented in less than 50% of district classrooms
Alternate Academic Content Standards for Math	Not Applicable
Alternate Academic Content Standards for Reading	Not Applicable
American School Counselor Association for Students	Implemented in less than 50% of district classrooms
English Language Proficiency	Not Applicable
Interpersonal Skills	Implemented in

	less than 50% of district classrooms
School Climate	Implemented in less than 50% of district classrooms
World Language	Implemented in less than 50% of district classrooms

Further explanation for columns selected "

SAS is used when writing curriculum, analyzing CDT results, and as a resource for teachers. Although this has been introduced to all staff, we do not believe it is fully utilized by 100% of faculty. Additionally, anything marked as NA is not explicitly taught at this level.

Current Technology Services

Required for LEA applying for eRate Priority 2 Funding

Describe your current telecommunications services, hardware, software and other services used to implement education. What strengths and weaknesses, related to technology, have been identified by staff, students or parents?

Telecommunication Services

- Fiber WAN
- Cable Internet
- Voice over IP phone system
- Standard telephone System
- Hosting Services (Email, Website, Grades, Library System, Mobile Device Management)

Hardware

- Servers
- UPS's
- Switches
- Firewall
- Content Filter
- PC's and Monitors
- iPads
- Smart and Promethean Boards/Projectors
- Wireless Access Points

<u>Software</u>

- Microsoft Volume Licensing
- VMWare
- Airwatch MDM
- Accelerated Reader

- Dibbels Reading
- Follet Library Services
- AutoCAD
- Adobe Creative Suite

Strengths related to technology

- Comprehensive Wireless Coverage
- Fiber WAN connection
- Smart or Promethean boards in all rooms k-5
- Middle School Technology Availability

Weaknesses related to technology

- Not enough staffing to keep up with technology needs.
- Aging technology needs replaced

Future Technology Services

Required for LEA applying for eRate Priority 2 Funding

Describe what specific telecommunications services, hardware, software and other services will be needed to improve education? (Address how you plan to take advantage of emerging technologies to improve education. Be sure to include the acquisition or implementation of such services/equipment within your Action Plans.)

Telecommunication Services

- · Add Fiber WAN connection to the last building in our district.
- Continue to move toward cloud hosting services.
- Move the remainder of our district over to Voice over IP phone system Hardware
- Implement more tablets and mobile devices district wide.
- · Keep up to date with software upgrades.
- Increase the technology to student ratio K-12.
- · Modernize the technology tools used in the classroom (i.e. smartboards).

Software

- · Implement relevant software programs K-5 in the areas of Math, Reading, and Writing.
- Continue to offer up to date and relevant software to grade 6 12

How to take advantage of emerging technologies

- Continually research trends in both technology and education.
- Talk to other district leads to find out what they are using.
- Evaluate emerging technologies thoroughly to ensure the relevance by including all stakeholders.
- Analyze the cost factors involved.
- Search for free and educationally priced services offered to educational institutions (i.e. Office 365 and Google Apps).

Professional Education

Characteristics

District's Professional Education Characteristics	EEP	EEI	ML	HS
Enhances the educator's content knowledge in the area of the educator's certification or assignment.	X	χ	$\sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{i$	$\sum_{i=1}^{n}$
Increases the educator's teaching skills based on effective practice research, with attention given to interventions for struggling students.	Х	х	Х	х
Provides educators with a variety of classroom-based assessment skills and the skills needed to analyze and use data in instructional decision making	Σ.,	\mathbf{X}	<u>×</u>	.
Empowers educators to work effectively with parents and community partners.	х	х	х	х

District's Professional Education Characteristics	EEP	EEI	ML	HS
Provides the knowledge and skills to think and plan Strategically, ensuring that assessments, curriculum Instruction, staff professional education, (eaching materials and interventions for struggling students are aligned toleach other, as well as to Pennsylvanias academic standards	X	X	×	X
Provides leaders with the ability to access and use appropriate data to inform decision making.	х	х	x	х
Empowers leaders to create a culture of teaching and the learning with an emphasis on learning	X	X	Σ^{-}	X
Instructs the leader in managing resources for effective results.	Х	х	x	x

Provide brief explanation of your process for ensuring these selected characteristics.

The District adheres to a Distributed Leadership philosophy where teachers and administrators share ownership for professional development. This form of teacher leadership and teacher experts has been quite effective.

In addition, the new PDE Teacher Effectiveness tool provides instructional critique and coaching on an individual basis. Leadership has the same opportunity with the new Principal Effectiveness tool. In addition, principals meet with the Superintendent bimonthly and have a 3 day retreat each summer for professional development.

Provide brief explanation for strategies not selected and how you plan to address their incorporation.

N/A

Strategies Ensuring Fidelity

• Using disaggregated student data to determine educators' learning priorities.

- Professional Development activities are developed that support implementation of strategies identified in your action plan.
- Clear expectations in terms of teacher practice are identified for staff implementation.
- Administrators participate fully in all professional development sessions targeted for their faculties.
- Every Professional development initiative includes components that provide ongoing support to teachers regarding implementation.
- The LEA has an ongoing monitoring system in place (i.e. walkthroughs, classroom observations).

Provide brief explanation of your process for ensuring these selected characteristics.

The District adheres to a Distributed Leadership philosophy where teachers and administrators share ownership for professional development. This form of teacher leadership and teacher experts has been quite effective.

In addition, the new PDE Teacher Effectiveness tool provides instructional critique and coaching on an individual basis. Leadership has the same opportunity with the new Principal Effectiveness tool. In addition, principals meet with the Superintendent bimonthly and have a 3 day retreat each summer for professional development.

Provide brief explanation for strategies not selected and how you plan to address their incorporation.

The District is reviewing a detailed needs assessment given to teachers this year for further planning.

Induction Program

- Inductees will know, understand and implement instructional practices validated by the LEA as known to improve student achievement.
- Inductees will assign challenging work to diverse student populations.
- Inductees will know the basic details and expectations related to LEA-wide initiatives, practices, policies and procedures.
- Inductees will know the basic details and expectations related to school initiatives, practices and procedures.
- Inductees will be able to access state curriculum frameworks and focus lesson design on leading students to mastery of all state academic standards, assessment anchors and eligible content (where appropriate) identified in the LEA's curricula.
- Inductees will effectively navigate the Standards Aligned System website.
- Inductees will know and apply LEA endorsed classroom management strategies.
- Inductees will know and utilize school/LEA resources that are available to assist students in crisis.

• Inductees will take advantage of opportunities to engage personally with other members of the faculty in order to develop a sense of collegiality and camaraderie.

Provide brief explanation of your process for ensuring these selected characteristics.

1. All teachers new to the district will work *four* additional professional development days and attend a four-day Teacher Academy for the first year of employment and will work *two* additional professional development days and will attend a two-day Teacher Academy for the second year of employment.

2. All New teacehrs are assigned a Teacher Mentor during the first year of the Induction Program. They meet with his/her assigned Mentor for a total of 2 hours each month outside of the school day (optional 3rd hour during September through January).

3. All inductees will visit other classrooms or specialized areas (i.e. art, library) and participate in structured, focused observations.

4. Inductees participate in district professional learning activities that may include study groups, in-service programs, and summer/after school workshops.

Provide brief explanation for strategies not selected and how you plan to address their incorporation.

All strategies are incorporated into the Blackhawk School District New Teacher Induction Program.

Needs of Inductees

- Frequent observations of inductee instructional practice by supervisor to identify needs.
- Regular meetings with mentors or coaches to reflect upon instructional practice to identify needs.
- Student PSSA data.
- Standardized student assessment data other than the PSSA.
- Classroom assessment data (Formative & Summative).
- Inductee survey (local, intermediate units and national level).
- Review of inductee lesson plans.

- Review of written reports summarizing instructional activity.
- Submission of inductee portfolio.
- Knowledge of successful research-based instructional models.
- Information collected from previous induction programs (e.g., program evaluations and second-year teacher interviews).

Provide brief explanation of your process for ensuring these selected characteristics.

Each inductee is required to maintain a portfolio that includes notes from monthly meetings with mentor and quarterly observations of professional staff. Building principals serve as supervisior for all new teachers and follow the Danielson Framwork in completing observations of the inductee. Classroll is used for grading purposes and to record lesson plans by teachers, grades 3-12. Lesson plans and report card completion for PreK-2 grade is monitored by each building principal.

Provide brief explanation for strategies not selected and you plan to address their incorporation.

Mentor teachers are not required to observe Inductees and the district does not have instructional coaches. Should the need arise for observations by mentors, the building principal would make arrangements for coverages as needed.

Mentor Characteristics

- Pool of possible mentors is comprised of teachers with outstanding work performance.
- Potential mentors have similar certifications and assignments.
- Potential mentors must model continuous learning and reflection.
- Potential mentors must have knowledge of LEA policies, procedures and resources.
- Potential mentors must have demonstrated ability to work effectively with students and other adults.
- Potential mentors must be willing to accept additional responsibility.

Provide brief explanation of your process for ensuring these selected characteristics.

In the spring, teachers are asked if they would like to be a mentor in the upcoming year. Adminsitration reviews candidates and matches the best cadidate up based on experiences, certification area, leadership, etc... If there is not a "best fit" then the adminsitration recruits other teachers who possess all of the above chracteristics.

Provide brief explanation for characteristics not selected and how you plan to address their incorporation.

Because we are a small district, having complimentary schedules is not always possible. We do, however, provide 2 hours per month for mentors and inductees to meet outside of the

school day during the first semester and 1 hour per month the second semester. Additionally, mentors have a brief review of expectations once they are chosen. Their leadership in the District is often enough preparation for mentors to be successful for induction.

Topics	Aug- Sep	Oct- Nov	Dec- Jan	Feb- Mar	Apr- May	Jun- Jul
Code of Professional Practice and Conduct for Educators	x			X		
Assessments	X	X	X	X	X	1
Best Instructional Practices	X	X	X	X	X	
Safe and Supportive Schools	X	X	X	X	X	X
Standards	X	X	X	X	X	
Curriculum	X	X	X	X	X	
Instruction	X	X	X	X	X	
Accommodations and Adaptations for diverse learners	x	x	x	x	x	
Data informed decision making	X	X	X	X	X	
Materials and Resources for Instruction	X	X	X	X	X	

Induction Program Timeline

If necessary, provide further explanation.

This narrative is empty.

Monitoring Evaluating and Induction Program

Identify the procedures for monitoring and evaluating the Induction program.

The District Induction Council reviews the implementation of the Induction Program and makes recommendations for changes and improvements to the Director of Curriculum. The District Induction Council meets twice annually to review the mid-year and final evaluations completed by the mentors and inductees. When needed, the induction council may assist the administration in carrying out the Induction program.

The District Induction Council members include:

- 1. Director of Curriculum
- 2. High School Principal or designee
- 3. Middle School Principal
- 4. Intermediate School Principal
- 5. Patterson Primary Principal
- 6. Northwestern Primary Principal

- 7. High School Teacher*
- 8. Middle School Teacher*
- 9. Elementary Teacher*

*Selected by the Blackhawk Education Association

Recording Process

Identify the recording process for inductee participation and program completion. (Check all that apply)

- Mentor documents his/her inductee's involvement in the program.
- A designated administrator receives, evaluates and archives all mentor records.
- School/LEA maintains accurate records of program completion and provide a certificate or statement of completion to each inductee who has completed the program.
- LEA administrator receives, tallies, and archives all LEA mentor records.
- Completion is verified by the LEA Chief Administrator on the Application for Level 2 Certification.

Special Education

Special Education Students

Total students identified: 333

Identification Method

Identify the District's method for identifying students with specific learning disabilities.

The Blackhawk School District has established and implemented procedures to identify, support, and if warranted, evaluate children who are evidencing significant learning difficulties. The method for identifying students with learning disabilities includes the Instructional Support Team process, which includes ongoing, frequent consultation with the school psychologist. There are two Instructional Support Teachers in the district. They are instrumental in collecting data, providing interventions, communicating with parents and Team members and facilitating school team meetings. Every attempt is made for students, whether referred by parent or staff, to go through the Instructional Support Team process

prior to a multidisciplinary evaluation (MDE).

- A. The first step is a screening process:
- Review of school records (Health, Attendance, Grades, Reports on file, Discipline referrals, etc.)
- Vision and Hearing Screenings check
- Curriculum based and Performance based Assessments
- Observations by counselors or IST Coordinator
- Parent Information
- Teacher/Counselor/Related Arts/Nurse/Information
- Consultation with the school psychologist

An IST meeting is scheduled and the parent is invited to meet with the school Team, including the classroom teacher, building principal, counselor, and Title 1 teacher. Other staff may participate if appropriate, such as Speech Clinician, Nurse, Related Arts teacher, School Psychologist, and agency representatives. During these meetings the Team will address:

*the student's strengths and needs

*define the concern(s) to be addressed

*set goals for the student

*decide upon scientifically-based interventions and assign role responsibilities *set timeline for interventions and for progress review

After the initial meeting, the Team reconvenes in approximately 30 days for a Progress review meeting. At this meeting, data is reviewed, progress monitoring, grades, FBA, graphs, etc. and relevant information is discussed and a Team decision is made regarding further action.

1.) If the student is making little or no progress towards the goals or if other problems have arisen, the Team will make a decision as to whether to continue or change the interventions or to refer the student for Multidisciplinary Evaluation (MDE) for eligibility for special education services.

2.) If the interventions have been successful and the student's progress has improved, then the student may continue to be monitored through IST or exit from the process. If the Team decides to change interventions, then the Team would reconvene for another progress review meeting in about 30 days.

B. If a student is referred for Multidisciplinary Evaluation and a learning disability is suspected, the School Psychologist currently uses a discrepancy model for identifying students with specific learning disabilities. The data collected through the IST process is provided to the school psychologist and is included in the Evaluation Report along with information from parents, staff and service providers. Individual standardized assessments are then conducted by the school psychologist to further assess a student's strengths and

needs, and overall functioning.

The following describes the method for identifying students with Specific Learning Disabilities:

Students are identified as having a Specific Learning Disability if the child does not achieve adequately for his/her age or grade level, and there is a severe discrepancy between the child's intellectual ability and achievement in one or more of the identified areas: Basic reading skill, Reading comprehension, Written expression, Math reasoning, Math calculations, Oral expression, and Listening comprehension. Results of the multidisciplinary evaluation indicate that a child has a specific learning disability when there is a significant discrepancy between achievement and intellectual ability in one or more of the aforementioned areas, and is in need of a specially designed instruction and support services. A determination as to whether or not a child has a specific learning disability is made by multiple assessments and information, such as norm referenced individual assessments, group standardized measures, teacher and parent input, records review, curriculum based assessments and observations. Relevant factors, such as behavioral difficulties and/or medical concerns are also considered when determining specific learning disabilities. Children are not identified as having a specific learning disability if the significant discrepancy between ability and achievement is primarily the result of a visual. hearing, or motor impairment, mental retardation, emotional disturbance, or environmental, cultural, or economic disadvantage or limited English proficiency. In addition, if the Team also finds that the student's underachievement is not due to lack of appropriate instruction, was provided scientifically based instruction, and that repeated assessments of achievement were conducted at reasonable intervals, and the student may be identified by the MDE as a student with a specific learning disability. After the Evaluation Report is completed, the MDE Team meets to review the information and determine the needed supports and services.

Enrollment

Review the Enrollment Difference Status. If necessary, describe how your district plans to address any significant disproportionalities.

The data is publicly available via the PennData website. You can view your most recent report. The link is: <u>http://penndata.hbg.psu.edu/BSEReports</u>

Not significantly disproportionate.

Non-Resident Students Oversight

1. How does the District meet its obligation under Section 1306 of the Public School Code as the host District at each location?

- 2. How does the District ensure that students are receiving a free appropriate public education (FAPE) in the least restrictive environment (LRE)?
- 3. What problems or barriers exist which limit the District's ability to meet its obligations under Section 1306 of the Public School Code?

The Blackhawk School District meets its obligations under Section 1306 as the host school district by communicating and collaborating with home school district staff, facility staff, as well as with the educational staff to ensure that nonresident students are receiving FAPE. Collaboration is also made with the bussing company to provide appropriate transportation for these students.

The Blackhawk School District arranges and participates in IEP Team meetings for these nonresident students, and communicates with parents/guardians of students, as well as with staff from the home school district and the resident facilities, on a regular and as needed basis.

At this time, there are no barriers that exist which would limit our ability to meet our obligation under Section 1306.

Incarcerated Students Oversight

Describe the system of oversight the District would implement to ensure that all incarcerated students who may be eligible for special education are located, identified, evaluated and when deemed eligible, are offered a free appropriate public education (FAPE).

Blackhawk School District provides FAPE to any eligible student residing in the district including students who may be incarcerated.

Although currently, there are no incarcerated youth within the boundaries of the school district, if the district became aware of an incarcerated student through the district's child find process and the student was in need of special education services, the ER/RR and IEP would be reviewed, an IEP Team meeting would be held, and an IEP would be developed describing the program and related services needed to meet the educational needs of the student. The IEP would outline the manner in which the program would be provided and the location of its services.

If the District became aware of an incarcerated student through the district's child find process who is thought to be exceptional and possibly in need of special education, a Permission to Evaluate and a Procedural Safeguard Notice would be issued to the student/parent/guardian. The MDE process as outlined in IDEA and Chapter 14 would be followed. If the incarcerated student is found to be eligible and in need of special education, the Invitation/IEP/NOREP process according to IDEA and Chapter 14 would be followed. Blackhawk School District is not a host to education services for incarcerated students in a local correction insitution under Section 1306.2 of the Public School Code.

Least Restrictive Environment

- 1. Describe the District procedures, which ensure that, to the maximum extent appropriate, children with disabilities, including those in private institutions, are educated with non-disabled children, and that removal from the regular education environment only occurs when education in that setting with supplementary aids and services, cannot be achieved satisfactorily.
- 2. Describe how the District is replicating successful programs, evidence-based models, and other PDE sponsored initiatives to enhance or expand the continuum of supports/services and education placement options available within the District to support students with disabilities access the general education curriculum in the least restrictive environment (LRE). (Provide information describing the manner in which the District utilizes site-based training, consultation and technical assistance opportunities available through PDE/PaTTAN, or other public or private agencies.)
- 3. Refer to and discuss the SPP targets and the district's percentages in the Indicator 5 section Educational Environments. Also discuss the number of students placed out of the district and how those placements were determined to assure that LRE requirements are met.

The Blackhawk School District considers a full continuum of services with the first option always being the regular education classroom with supplemental aids and services. The District follows procedures that ensure that children with disabilities are educated with their non-disabled peers. The Least Restrictive Environment for each student is dependent upon the IEP Team's determination of what is appropriate for the student, however, children with disabilities are educated within the regular education environment to the maximum extent appropriate.

According to Comparison Data from PDE/BSE, Blackhawk has successfully progressed in the area of affording our students maximum integration. In the category of "Special Education Inside the Regular Classroom 80% or More," we have grown steadily from the school year of 2005-2006 where we were educating students 55.7% in this category till more recently in the 2009-2010 school year where we educated 85.9% in this category. Steady progress was also made in the school years in between those identified years (2006-07, 07-08, and 08-09). Overall, this is a significant improvement and provides evidence that our District has been successful in providing special education services and supports in the least restrictive environment.

Parent involvement is an integral part of the LRE decision-making process. The discussion regarding the educational placement and services for the student always begins with the consideration by the IEP Team for the option of service delivery in the regular education classroom with supplementary aids and services and extracurricular activities to further clarify the needs in the least restrictive environment. The Team will determine the degree and level of educational need and to provide each student the opportunity to succeed first within the regular education classroom. Instructional support strategies, scientifically-based interventions, remedial courses, co-teaching models, inclusive practices, Title 1 Reading, after school programs, supplemental aides and services, and differentiated instruction are some examples of strategies employed to assist the student within the context of the regular education environment.

In addition, paraprofessionals and personal care assistants are employed by the Blackhawk School District to assist students with more significant disabilities so they can participate and remain within their home school. Inclusive practices are implemented in all buildings within the district. In addition, all students are afforded the opportunity to participate in clubs and extra-curricular activities. The school district encourages all students to participate in all activities.

The Instructional Support process continues to be implemented at all levels prior to referral for multidisciplinary evaluation. The Team strives to support students in the general education setting before referring for a multidisciplinary evaluation.

Our District wide Positive Behavioral Support Plan, Do Your P.A.R.T. (Perseverance, Accountability, Respect, and Trust), and the Olweus Anti-Bullying Program also support our students and address behavioral expectations, as well as continued data collection and feedback for staff and parents. Do Your PART was initiated in December of 2009 to set behavioral expectations of students and guidelines for discipline. The Olweus program officially began in Fall of 2010, however, staff and committees were trained in the year of 2009-10 to assist with implementation of the program. Together, these two behavioral programs support all students and maintaining them successfully in the school setting. Presently, the District has a continuum of programs and services available either within the District, at locations operated by neighboring school districts, by the Intermediate Unit, or through locally operated private facilities. After first considering the student's home school, if the IEP Team determines that more restrictive options may be required to successfully meet the student's degree of need, then a full range of services is next considered. All of these steps ensure Blackhawk School District's commitment that to the fullest extent possible, children with disabilities are educated with non-disabled peers;

- Placement decision is made at the IEP meeting with parent involvement.
- The student's full range of needs are determined.
- The full range of placement options are discussed and considered beginning with services provided in the regular education setting.
- Placement to a more restrictive setting outside the regular education setting would be determined appropriate only when services could not be appropriately delivered in the regular education setting.
- Decisions for placement would be based upon the educational and emotional needs of the individual student.
- If placement outside the regular education setting is deemed necessary, the IEP Team will consider opportunities for the student to participate in appropriate programs, curricular and extra-curricular activities and inclusive settings as appropriate.

Information describing the manner in which the District utilizes site-based training, consultation and technical assistance opportunities available through PDE/PaTTAN, or other public or private agencies.

- Partnership with Slippery Rock University for site-based training of all staff in inclusive practices and co-teaching models.
- Inclusive Practices Grant-PaTTAN
- Budgeting funds to support common planning time for co-teaching.
- BVIU/TAC staff supports inclusive practices within district, as well as provides on site trainings for staff.
- Administration supports special education programs and inclusive practices and ongoing training, and consultation regarding inclusion, co-teaching models and common planning time for teachers and paraprofessionals.
- Collaboration with BVIU/PaTTAN and neighboring school districts to institute practices supporting LRE.
- Consultation and coordination of the Student Assistance Programs and staff for student referrals, partnered with the Prevention Network of Beaver County.
- Training in differentiated instruction and Tiering.
- Flex grouping at all levels for areas of reading and math instruction.
- Training and implementation of reciprocal teaching strategies.
- Training and implementation of Reading Apprenticeship strategies.
- Data driven decision making teams.
- Professional Learning Communities (PLCS) team meetings at all grade levels to support instructional needs and student needs.
- CDC council meetings to support differentiated instruction and instructional needs.
- Utilizing alternative assessments.
- Accountability Grant funds to support after school programs.
- Training and implementation of DIBELS.
- Direct instruction and guided reading in primary buildings.
- SRA Corrective Reading Program for at-risk readers.
- District implementation of Data Wise Plan.
- MH/MR services through the Beaver County Behavioral Health office in Beaver Falls.
- Office of Vocational Rehabilitation (OVR).
- Wrap around services (BSC/TSS/Mobile Therapy) are utilized and collaborated with to ensure better behavioral functioning.

- Beaver County Rehabilitation Center (BCRC).
- Job Training of Beaver County.

BSD welcomes the assistance of local agencies and participates in team meetings with the behavioral staff, TSS, and BSC.

All of these steps ensure Blackhawk School District's commitment that, to the fullest extent possible, children with disabilities are educated with nondisabled peers. Additional steps include intense training in inclusive practices provided by a team of professors from Slippery Rock University, technology training for differentiated instruction, and a laptop provided for inclusion classes.

Children in private institutions are entitled to the same considerations and commitments as described above.

Behavior Support Services

Provide a summary of the District policy on behavioral support services including, but not limited to, the school wide positive behavior supports (PBS). Describe training provided to staff in the use of positive behavior supports, de-escalation techniques and responses to behavior that may require immediate intervention. If the district also has School-Based Behavioral Health Services, please discuss it.

- Social skills instruction (Social Stories)
- Counseling supports (school counselors, school psychologist, SAP Team, group meetings, IST, BSC/MT/TSS support)
- Structuring activities to create opportunities for positive social interaction
- Use cooperative learning group to foster social interactions
- Peer supports (e.g. facilitating friendships)
- Individualized behavior support plans
- Modification of rules and expectations
- Teach social communication skills, such as greetings, conversations, taking turns, sharing, negotiations, etc.
- School wide anti-bullying program, Olweus
- School wide "Do Your PART" Program
- Lunch Bunch Social Skills Group
- Lunch buddies
- Use of time management strategies

- Create a structured environment with predictable routines
- CPI Training for staff
- Mental Health providers/family based intervention teams, mobile therapist, BSC, TSS workers
- IST/SAP/PLC Teams
- Classroom positive reinforcement systems
- Assistance as needed with extra curricular activities-plays, musicals, band, concerts, sports, etc.
- D&A Counseling as required
- Grieg counseling as needed
- Peer Tutoring
- Provide support to teachers on instructional design (e.g. minimizing written directions, verbal prompts, cueing, etc.)
- Use coping/stress reduction skills when student is anxious about performance or behavior escalates
- Use of Sensory Integration Rooms for stress/anxiety reduction
- Use gestural, physical, proximity prompts to implement one of more of the crisis management procedures
- Use ABA for positive replacement behaviors
- Ignore inappropriate behavior when possible and use positive reinforcement for all appropriate behavior
- Anticipate and prevent the antecedents causing behavior
- Use FBA to determine behaviors
- Minimize timed activities; structure activities for class/team effort and cooperation
- Prepare students for transition or special event (e.g. fire drill)
- Use visual schedule; routine; verbal warning when a transition or different activity will take place
- Role play/model appropriate behavior
- Validate feelings/consistency of social skills development with social skills stories
- Teach student to self-monitor behavior; discuss student's view of behavior

- Adapt assignments/curriculum so student is able to achieve success
- Use a level system/positive reward system
- On-site training with guided practice, workshops with joint planning periods, conferences, study groups, District PLC and Teacher Development
- The District provides on-going training and refreshers for staff with School-wide positive behavioral support and the "Do Your PART" behavior expectations. Behavior expectations are outlined in students' agendas each year, and students and parents are regularly informed of behavior expectations in our school settings.
- On-site training with guided practice, conferences.
- A core team of staff members from each building level were trained and certified in CPI techniques.

Intensive Interagency/Ensuring FAPE/Hard to Place Students

- 1. If the LEA is having difficulty ensuring FAPE for an individual student or a particular disability category, describe the procedures and analysis methods used to determine gaps in the continuum of special education supports, services and education placement options available for students with disabilities.
- 2. Include information detailing successful programs, services, education placements as well as identified gaps in current programs, services, and education placements not available within the LEA. Include an overview of services provided through interagency collaboration within the LEA.
- 3. Discuss any expansion of the continuum of services planned during the life of this plan.

The Blackhawk School District is currently providing services and supports to all students identified with disabilities, and is not having difficulty ensuring FAPE for an individual student or any disability category. Special education and general education teachers at all levels design and implement the necessary adaptations and modifications with appropriate supplementary aids and services needed for students to be successful in the general education curriculum.

At all levels, the Instructional support process is implemented to ensure that each student has every opportunity to succeed in the general education classroom with appropriate interventions as needed. Through this process, when a student is referred for a multidisciplinary evaluation and is eligible for special education services, the IEP Team will implement instruction and services using supplementary aids and services to the maximum extent to ensure success within the general education classroom.

Personal care assistants and instructional aides are provided to assist students who have more significant disabilities so they may participate in the general education curriculum within their home school. The IEP Team always considers a full continuum of services. When considering placement and services, the regular education classroom is always the first option considered with appropriate supplementary aids and services to enable children with disabilities to be educated with nondisabled peers to the maximum extent appropriate. If the team determines that this option will not meet the student's needs, then more restrictive options are considered.

The District offers a full range of services from supportive intervention in inclusive classroom settings to resource room support to part-time levels of intervention. Life skills support will be provided beginning in the Fall of 2011 to support our students with more complex support needs. Learning Support and Speech and Language Support are offered at all levels. The Beaver Valley Intermediate Unit provides Vision Support and Hearing Support services at all building levels as deemed necessary.

If a student's needs cannot be appropriately met within the school district, the Team considers other options which have been successful:

- Reconvene the IEP Team
- Provide the necessary support for school personnel
- The BVIU would be contacted for assistance and we would identify the existing services and supports available within our district and community such as MH/MR, Achieva, Behavioral Health, Prevention Network, BCRC, OVR, Lifesteps, Seneca Ridge, Drug & Alcohol Services, Base Service Unit
- In some cases the BSD has utilized services from neighboring school districts, as well as mental health providers, such as wrap-around agencies
- Approved Private Schools when needed such as Watson Institute-The Education Center, Wesley Spectrum Academy, School for the Blind
- Private Schools such as Holy Family Day School, Glade Run, Presley Ridge, McGuire Memorial can be considered
- Regional Choice Initiative (RCI) operated through the Beaver Valley Intermediate Unit, which is comparable to blended schools programming
- Blackhawk High School Cyber Program, which is monitored by high school staff, and students are able to follow a high school curriculum
- Homebound instruction and/or Instruction in the home may be considered by the IEP Team if warranted

To address any identified gaps in the continuum of services, the BSD administrative staff meets twice a month for Administrative meetings to discuss district needs and programs. Data from screening information, transition meetings, and assessment information is reviewed at building levels and district level to determine gaps in services and programs. Based on these collaborative efforts, a Plan would be developed to address such gaps in services and presented to the Superintendent, and if necessary, to the School Board, for approval.

The Blackhawk School District works closely with the BVIU and PaTTAN for Interagency Collaboration. The interagency approach will be implemented in an on-going proactive manner through collaboration between behavior agencies, BVIU, and the District. Collaboration of services entails our responsibility to attend and participate in interagency trainings and meetings to increase our awareness of the local resources. If a situation warrants collaboration, the District would contact the Intermediate Unit Interagency Coordinator who will coordinate a meeting including all the necessary school personnel, representatives of key agencies and organizations and parents to ensure FAPE for students with disabilities.

If the District was ever in a position where a placement that provides FAPE for a student cannot be located, the District would contact the Bureau of Special Education for guidance and advice.

Strengths and Highlights

Describe the strengths and highlights of your current special education services and programs. Include in this section directions on how the district provides trainings for staff, faculty and parents.

The Blackhawk School District has a dedicated, caring and committed special education, general education and administrative staff who work collaboratively to address the needs of all the students. This Team approach is used in making all decisions regarding at-risk students and students with special needs. All professional staff, administrators, principals, counselors, paraprofessionals and the school psychologist are committed to working collaboratively in all aspects of decision making regarding students with disabilities. The following information highlights the initiatives and strengths of our current special education services and support programs for students in Blackhawk School District:

- An effective K-12 Instructional Support Team program and pre-referral process.
- Special education students are expected to meet the academic standards developed by the district for all students.
- Evidence-based curriculum in reading and math.
- Data driven instruction and interventions.
- Adoption of universal screening procedures.
- Inclusive practices are a priority at all building levels.
- Consultation with Slippery Rock University for professional development in Inclusive practices and Co-teaching models.

- Continual staff development opportunities provided for all staff in progress monitoring, differentiated instruction, Tiering, learning styles and instructional strategies and positive behavior support/Functional Behavioral Assessment.
- Implementation of District-wide Anti-Bullying program called Olweus Bullying Prevention Program. Training has included all staff employees within district, such as core committee trained staff, who have then trained all District employees.
- Implementation of District-wide Professional Learning Communities (PLC) at all buildings. PLCs are considered to be a driving force behind student support and improving teacher practices by frequent collaboration among teachers regarding instruction, assessments, and student progress/needs.
- On-going communication between parents and staff through IEP Team meetings, phone contacts, agenda books, behavior plans, the internet, Classroll, Quarterly Progress reports, Interim reports, Report cards.
- Monthly Special Education Department meetings to address ongoing student needs and training needs, and to continue to support students and staff.
- Monthly paraprofessional meetings to address ongoing student needs and training needs.
- Use of Sensory Integration Rooms in 2 Primary buildings and the Intermediate School.
- Before and after school programs, such as Jumpstart Reading and Cougar Time.
- Speech/Language services at all District levels.
- Occupational Therapy, Physical Therapy, Orientation and Mobility, Braille services, and Audiology/Hearing impaired support at all District levels.
- Professional School Counselors K-12, SAP Teams, and Crisis Intervention Teams are available for support and interventions.
- Graduation Rate met SPP Target.
- Drop out rate met SPP Target.
- Attendance rate has met SPP Target.
- State Targets have been met regarding AYP in the areas of Reading, Math, Writing, and Science across all schools in the District, as well as subgroups including Special Education.
- Strong positive community and interagency relationships.
- Partnership with Beaver Valley Intermediate Unit #27 for on-site trainings, professional development and consultation.

- Administrative support for Special Education initiatives, such as the Life Skills Program-Cougar P.R.I.D.E. (Parent teaming, Responsiveness to students, Individual goals and instruction, and Educational foundations and standards).
- Highly Qualified teachers and paraeducators.
- A continuum of services is provided through Transition plans as students change from building to building within the District for grades 2 to 3, 5 to 6, and 7 to 8.
- Transition services for IEP students are a focus at the secondary level.
- Monthly transition meetings at the High School level.
- Training for paraeducators provided locally and through the Beaver Valley Intermediate Unit and PaTTAN, as well as inservice trainings conducted by School Psychologist.
- Access to a wide variety of staff development and training opportunities through workshops, conferences, Intermediate Unit, PaTTAN, Slippery Rock, including training in Reading Apprenticeship, Reciprocal Teaching, Guided Reading, Professional Learning Communities, Data Analysis, Differentiated Instruction, IEP Development, NOREP writing, ASSIST training, inclusive practices, DIBELS, Progress Monitoring, Behavior Support, Assistive Technology, Autism Spectrum Disorders, and Social Skills.
- Leader Services program which provides instant communication with the Intermediate Unit for data management/Child Count and PIMS reporting, as well as the School-based ACCESS program.
- Classroll for recording and management of student grades, attendance, disciplinary actions, district test results, including 4Sight and PSSA results.
- The district utilizes 4Sight assessment to monitor student progress in grades 3-12 as well as Star reader, Star math, Accelerated Reader, Guided Reading, DIBELS, and Reciprocal Teaching.
- All teachers in the district have personal computers and the Special Education teachers have been provided laptops to manage student data and input information for Evaluation Reports and IEPs using progress monitoring techniques. Wireless keyboards are utilized to facilitate IEP Team meetings and the documentation process.
- SRA Corrective Reading program for special needs students in grades 3-11. The progress monitoring information strongly supports the effectiveness of this program.
- Assistive technology for individual students, classroom FM systems for students with hearing impairments. Close collaboration with the BVIU regarding the necessary and recommended supports for our students with hearing impairments.
- The BSD is committed to staying current on effective and best instructional practices. The District participates in numerous initiatives, such as Data Driven Decision
Making, Value Added Assessment, Progress Monitoring, Classrooms for the Future, Safe Schools, Health and Wellness Initiative, and Reading Apprenticeship.

- The District utilizes the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) for all students in grades K-3 and IEP students in grades 4-5 to drive instruction based on assessment results. In addition, the District purchased a new reading series through Harcourt which aligns interventions with DIBELS.
- BSD is proud to have high parent participation in IEP meetings and other Team meetings.
- Training for paraprofessionals using the PDE paraeducator competencies with partnership with BVIU and PaTTAN and inservice programs.
- Related services are provided to students, such as guidance counseling, personal care assistants, and hearing support.
- Personal Care Assistants are provided as deemed needed based on student needs and functioning levels.
- Instructional Aides are employed at every level in order to support the students in resource rooms and inclusive classroom settings.
- The District contracts with the Intermediate Unit and other local educational facilities to provide appropriate and specific educational programs for those students who require significant intensive services which cannot be provided within the school district.

The Blackhawk School District serves students with disabilities in grades K-12 through a wide range of services in order to appropriately address individual needs with the maximum support of supplementary aides and services. During IEP meetings, parents of special needs children have consistently expressed their satisfaction with the programs and services provided by the District. Blackhawk School District has always valued parent involvement and we have consistently had a high rate of parent involvement at IEP meetings, trainings, and school functions. There are well established, positive relationships between staff and parents at all grade levels within the District as well as those interagency relationships developed between parents and other educational providers, agencies, and neighboring school districts.

Monthly Special Education Departmental meetings are utilized to collaborate on students' progress and ongoing special needs. Substantial focus is placed on meeting the needs of students, as well as staff, so that students are met with success in their school environment and beyond. School District initiatives are also discussed as they relate to special education services and supports.

Special education students are expected to meet the academic standards developed by the District for all students. Data is analyzed from DIBELS, 4Sight tests, standardized tests, quarterly assessments, PSSA and PASA results to monitor how students are meeting academic standards and to achieve success through continuous growth and support. The

District will continue to include Special Education students in the District-wide testing program and will continue to analyze scores and progress monitor students. Assistive Technology and supplemental aids are provided as needed to address student learning needs. Special Education teachers are trained to use the ASSIST document to assign students to the PASA tests.

The District provides quality programs and services to all of its students. Inclusive practices are a priority in all buildings in the District. Blackhawk continues to provide professional development to improve inclusive practices. Newly hired teachers are trained as part of the Induction process, and all teachers are continually part of ongoing collaboration with special education teachers and support staff regarding inclusion, Co-teaching models, effective teaching strategies, differentiated instruction and technology in order to accommodate students with disabilities. Special education teachers participate in standards-based learning seminars, NOREP writing trainings, and serve on curriculum committees provided by the District to enable collaboration of content instruction. Professional Learning Communities (PLCs) are considered to be the driving force behind student support and improving teaching practices by using the combined talents and insights of teachers to contribute to and support one another in an attempt to ensure student success. The school also uses PLCs to change instruction and share or participate in academic decision-making. Teachers meet on a routine basis to have open discussions regarding student work, progress, and even struggles of the learners within their classrooms. The strategies of experts are shared in order to constantly improve their ability to facilitate student learning. PLC meetings are also used to discuss student issues, and are also used to meet with parents as well. Teachers discuss lessons and upcoming activities so that tests, projects, etc. do not overlap resulting in students having multiple expectations at the same time. PLCs also discuss and implement District Initiatives such as, differentiated instruction, Robust Vocabulary, Reading Apprenticeships, Olweus Anti-Bullying program, and book studies.

Continual staff development opportunities, trainings, conferences, and workshops are provided for all staff in progress monitoring. Autism spectrum disorders, Select Mutism, Tourette's, social skills, differentiated instruction, learning styles, instructional strategies, inclusive practices, technology, co-teaching models, Reading Apprenticeship, and behavior support. The special education staff has been trained in the area of writing comprehensive Behavior Support plans to assist students to maintain appropriate behaviors and support them in the least restrictive environment. The staff has also been trained in writing effective IEP Goals using the LEADER IEPWriter program. NOREP training has also been provided. Each staff member has been provided computers and training for accessing students' grades, attendance, progress and information to assist in progress monitoring and meeting students' individual needs.

A continuum of services is offered to eligible students within the district and in a variety of settings neighboring the district, with the goal of maintaining a least restrictive environment. A collaborative team approach is used in making all decisions regarding eligible students. Parent involvement is a high priority, beginning with Early Intervention collaboration, the Child Find process, Instructional Support team process, to the MDE and

IEP development. Communication is on-going between parent and staff. Agenda books for all students and Classroll are ways that parents can monitor their child's progress throughout the year.

The Blackhawk School District cares about the safety and well-being of our students. In order to assist in this goal, in January 2010 a core committee of staff were trained in the Olweus Bullying Prevention Program. This program has over 35 years of research and successful implementation all over the world, and is the most researched and best-known bullying program available. The goals of this program are to reduce bullying problems and prevent new bullying problems from happening, as well as to improve overall peer relations. In May 2010, the core committee trained staff trained all the staff in the District on the Olweus program. The Olweus Program was formally kicked off in Fall of 2010 in all buildings in the District. Parent awareness activities were arranged regularly to inform parents of Olweus, and the goals and behavioral strategies being used.

A new initiative is underway at our District called the Cougar P.R.I.D.E. program, which is an innovative Life Skills program that will embrace, support, and challenge our students with more complex and exceptional needs that are addressed in Individualized Education Programs (IEPs). The PRIDE program began in Fall of 2011. Our PRIDE program enables our staff to support students with exceptional needs, while maintaining these students in their home district with typical peers in a public school setting. Students receive weekly speech/language therapy and multisensory support, as well as occupational and physical therapies. Students will receive individualized instruction based on their academic levels and functioning needs. Community based instruction will be a focus to assist in development of daily living skills, vocational skills and social skills. Frequent Team meetings will be an integral part of the program that can address student needs, schedules, and ongoing progress, and allow for increased collaboration among team members. The Blackhawk School District prides itself on a strong Instructional Support Team process, child find process and the pre-referral process which are very effective in identifying at-risk students and providing general education teachers and parents knowledge of pre-referral strategies and interventions in order to support struggling students. Through this collaboration effort, not only are school teams better able to support students, but also, referrals for evaluations for special education services are reduced, which ultimately reduces the number of students receiving special education services.

Transition continues to be a focus at the secondary level. The Transition Coordinator and committee members including special education staff, OVR personnel, district counselors, and the Transition TaC staff member from the BVIU meet monthly to discuss transition programs and plans for individual students. Staff has also received training regarding Indicator 13 and writing IEP Transition Goals. Special education students are required to complete the Blackhawk School District Graduation Project, beginning in eighth grade with interest inventories to assist them in exploring and planning for post graduation, work/career opportunities.

Paraprofessionals have received training on an on-going basis from the Beaver Valley Intermediate Unit, PaTTAN, and the District School Psychologist. All paraprofessionals who work directly with special education students have received, or are currently working on, the Credential of Competency required by the Bureau of Special Education. District paraprofessionals continue to assist students in inclusion classrooms, as well as in pull out settings, to insure student achievement.

There continues to be collaboration and a well-developed network between BSD and area preschools and Early Intervention agencies providing for effective transition of preschool children to the District kindergarten program. Through Transition meetings, the District is made aware of any specific needs or concerns which can be addressed as the child enters kindergarten. Parent teaming is essential with regards to this transition and addressing student needs.

The Blackhawk School District remains committed to meeting its obligation to educate special education students in order to provide FAPE.

Assurances

Safe and Supportive Schools Assurances

The LEA has verified the following Assurances:

- Implementation of a comprehensive and integrated K-12 program of student services based on the needs of its students. (in compliance with <u>§ 12.41(a)</u>)
- Free Education and Attendance (in compliance with § 12.1)
- School Rules (in compliance with § 12.3)
- Collection, maintenance and dissemination of student records (in compliance <u>§ 12.31(a)</u> and <u>§ 12.32</u>)
- Discrimination (in compliance with § 12.4)
- Corporal Punishment (in compliance with § 12.5)
- Exclusion from School, Classes, Hearings (in compliance with § 12.6, § 12.7, § 12.8)
- Freedom of Expression (in compliance with § 12.9)
- Flag Salute and Pledge of Allegiance (in compliance with <u>§ 12.10</u>)
- Hair and Dress (in compliance with § 12.11)
- Confidential Communications (in compliance with § 12.12)
- Searches (in compliance with § 12.14)
- Emergency Care and Administration of Medication and Treatment (in compliance with <u>35</u> P.S. § 780-101—780-144)
- Parents or guardians are informed regarding individual survey student assessments and provided a process for refusal to participate (consistent with <u>§ 445 of the General Education</u> <u>Provisions Act (20 U.S.C.A. § 1232h)</u> and in compliance with <u>§ 12.41(d)</u>)
- Persons delivering student services shall be specifically licensed or certified as required by statute or regulation (in compliance with <u>§ 12.41(e)</u>)
- Development and Implementation of Local Wellness Program (in compliance with <u>Public</u> Law 108-265. Section 204)
- Early Intervention Services System Act (if applicable) (<u>11 P.S. § 875-101-875-503</u>)

- Establishment and Implementation of Student Assistance Programs at all of levels of the school system
- Acceptable Use Policy for Technology Resources
- Providing career information and assessments so that students and parents or guardians might become aware of the world of work and career options available.

Special Education Assurances

The Local Education Agency (District) has verified the following Assurances:

- Implementation of a full range of services, programs and alternative placements available to the school district for placement and implementation of the special education programs in the school district.
- Implementation of a child find system to locate, identify and evaluate young children and children who are thought to be a child with a disability eligible for special education residing within the school district's jurisdiction. Child find data is collected, maintained and used in decision-making. Child find process and procedures are evaluated for its effectiveness. The District implements mechanisms to disseminate child find information to the public, organizations, agencies and individuals on at least an annual basis.
- Assurances of students with disabilities are included in general education programs and extracurricular and non-academic programs and activities to the maximum extent appropriate in accordance with an Individualized Education Program.
- Compliance with the PA Department of Education, Bureau of Special Education's report revision notice process.
- Following the state and federal guidelines for participation of students with disabilities in state and district-wide assessments including the determination of participation, the need for accommodations, and the methods of assessing students for whom regular assessment is not appropriate.
- Assurance of funds received through participation in the medical assistance reimbursement program, ACCESS, will be used to enhance or expand the current level of services and programs provided to students with disabilities in this local education agency.

24 P.S. §1306 and §1306.2 Facilities

There are no facilities.

Least Restrictive	Environment	Facilities
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Facility Name	Type of Facility	Type of Service	Number of Students Placed
New Horizon	Special Education Centers	Life Skills Support, Multi-Disciplinary Support	17
McGuire	Approved Private Schools	Autistic Support; Life Skills Support: Multi-Disciplinary Support	3
Economy Elementary	Neighboring School Districts	Autistic Support	2
Southwood	Other	Emotional Support	1

Special Education Program Profile

There are no programs.

Special Education Support Services

Support Service	Location	Teacher FTE
Special Education Director	District	1
Occupational Therapist	District	0.25
Physical Therapist	District	0.25
Special Education Secretary	District	1
Paraprofessional	Patterson	6
Paraprofessional	Northwestern	6
Paraprofessional	Blackhawk Intermediate School	13
Paraprofessional	Highland Middle School	5
Paraprofessional	Blackhawk High School	5.5

Special Education Contracted Services

Special Education Contracted Services	Operator	Amt of Time per Week
School Psychologist	Ouside Contractor	3 Days

Needs Assessment

Record School Patterns

Question:

After reviewing school level accomplishments and systemic challenges, what patterns can you identify among your schools?

What other information do you still need to assess?

Answer:

NA

District Accomplishments

Accomplishment #1: Education

- 1. Connected STEM courses in the high school to careers and speakers (Science, Technology, Engineering, Math)
- 2. Implemented 9th grade Academy in 2013-2014
- 3. Implemented the Daily 5 Reading Framework in grades K-5
- 4. Implemented Reading assessments in grades K-5
- 5. Reduced outside cyber student enrollment numbers and costs
- 6. Aligned social studies and science curriculum to meet Common Core Standards
- 7. Piloted PDE Teacher Effectiveness Tool for volunteer teachers and principals
- 8. Prepared for and implement assessment changes (i.e. Keystone Exams)
- 9. Increased positive P.R. for educational programs in District
- 10. Oversee Blackhawk teachers instructing Blackhawk Cyber courses
- 11. Implemented Full Day Kindergarten and Pre-K Program

Technology

- 1. Created back-ups for student, staff, and financial data
- 2. Implemented BYOT (Bring Your Own Technology) options, address safety issues, and resolve policy concerns
- 3. Evaluated the infrastructure of all technology in the District and map out 3 year technology plan
- 4. Reviewed technology contracts and find opportunities for better quality service at a lower cost
- 5. Coordinated new technology at HMS and train staff for utilization

Business Office

- 1. Continue to address audit findings documented in audit reports
- 2. Meet and Discuss during 2012-13: Act 93, contract employees, and confidential secretaries
- 3. Support efforts of Wellness Committee to reduce health insurance costs
- 4. Refinance 2007 Bond Issue if rates warrant
- 5. Utilize online training modules from Public School Works for staff trainings
- 6. Implement sub service and compensated day tracking for employees (Aesop)
- 7. Bid, order, and receive furniture for the middle school

Food Service

- 1. Inform parents and students of lunch requirements and healthy options
- 2. Implement Healthy Food Kids Act
- 3. Implement new food court system at Highland
- 4. Limit financial loss / make profit

Buildings and Grounds

- 1. Continue to monitor and reduce overtime costs of Custodians and Maintenance
- 2. Document progress of Highland Renovation Project on website
- 3. Communicate progress of Highland Renovation Project to middle school parents
- 4. Complete District-wide ADA capital improvement projects
- 5. Move 8th grade to HMS Summer 2013
- 6. Reorganize space at high school for 2013-2014 school year
- 7. Eliminate un-needed used furniture

District Concerns

Concern #1:

Close the achievement gap in each building as determined by the PA Profile.

Concern #2:

Using PVAAS as an indicator for growth, each grade level will show a year's worth of growth in math and reading.

.....

Concern #3:

Identify a math screener for students in grades K-5.

Concern #4:

Implement a research based writing curriculum in grades K-5.

Concern #5:

Increase achievement on Keystone exams by 3-5% each year.

Concern #6:

Using BAS assessment, have 100% of students reading at or above grade level as they exit 2nd grade.

Concern #7:

Utilize technology to increase academic achievement.

Prioritized Systemic Challenges

Systemic Challenge #1 (System #3) Establish a district system that fully ensures staff members in every school use standards aligned assessments to monitor student achievement and adjust instructional practices.

Aligned Concerns:

Close the achievement gap in each building as determined by the PA Profile.

Using PVAAS as an indicator for growth, each grade level will show a year's worth of growth in math and reading.

Identify a math screener for students in grades K-5.

Implement a research based writing curriculum in grades K-5.

Increase achievement on Keystone exams by 3-5% each year.

Using BAS assessment, have 100% of students reading at or above grade level as they exit 2nd grade.

Systemic Challenge #2 (System #7) Establish a district system that fully ensures students who are academically at risk are identified early and are supported by a process that provides interventions based upon student needs and includes procedures for monitoring effectiveness.

Aligned Concerns:

Close the achievement gap in each building as determined by the PA Profile.

Using PVAAS as an indicator for growth, each grade level will show a year's worth of growth in math and reading.

Identify a math screener for students in grades K-5.

Increase achievement on Keystone exams by 3-5% each year.

Using BAS assessment, have 100% of students reading at or above grade level as they exit 2nd grade.

Utilize technology to increase academic achievement.

Systemic Challenge #3 (System #1) Establish a district system that fully ensures consistent implementation of standards aligned curricula across all schools for all students.

Aligned Concerns:

Close the achievement gap in each building as determined by the PA Profile.

Using PVAAS as an indicator for growth, each grade level will show a year's worth of growth in math and reading.

Implement a research based writing curriculum in grades K-5.

Increase achievement on Keystone exams by 3-5% each year.

Using BAS assessment, have 100% of students reading at or above grade level as they exit 2nd grade.

......

Systemic Challenge #4 (System #2) Establish a district system that fully ensures the consistent implementation of effective instructional practices across all classrooms in each school.

Aligned Concerns:

Close the achievement gap in each building as determined by the PA Profile.

Using PVAAS as an indicator for growth, each grade level will show a year's worth of growth in math and reading.

Implement a research based writing curriculum in grades K-5.

Increase achievement on Keystone exams by 3-5% each year.

Using BAS assessment, have 100% of students reading at or above grade level as they exit 2nd grade.

Utilize technology to increase academic achievement.

District Level Plan

Action Plans

Goal #1: Establish a district system that fully ensures staff members in every school use standards aligned assessments to monitor student achievement and adjust instructional practices.

Related Challenges:

- Establish a district system that fully ensures the consistent implementation of effective instructional practices across all classrooms in each school.
- Establish a district system that fully ensures students who are academically at risk are identified early and are supported by a process that provides interventions based upon student needs and includes procedures for monitoring effectiveness.

Indicators of Effectiveness:

Type: Annual

Data Source: PVAAS, Keystone, BAS, PSSAs

Specific Targets: ?

Strategies:

Common Assessment within Grade/Subject

Description: WWC reports the effective use of data can have a positive impact upon student achievement; using common assessments to inform teacher practice is one such use of data. (Source: http://ies.ed.gov/ncee/wwc/pdf/practice_guides/dddm_pg_092909.pdf) Teacher Moderation: Collaborative Assessment of Student Work and Common Assessments provide detailed looks at the development and use of common assessments. (Sources: http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Teacher Moderation.pdf and Common Assessments: Mike Schmoker. (2006) Results Now: How We Can Achieve Unprecedented Improvements in Teaching and Learning. Alexandria. Va.: ASCD.)

SAS Alignment: Assessment, Instruction

Action Steps:

Increase Student Acheivement

Description:

1. Alighn all curriculum, as applicable to PA Core Standards

2. Identify common assessments in each grade level along with timeline as to when assessments are given.

3. Review data in a timely manner and make instructional adjustments including reteaching, tutoring, interventions, etc...

Start Date: 1/1/2014 End Date: 6/30/2018

Program Area(s): Professional Education

Supported Strategies: None selected

Goal #2: Establish a district system that fully ensures students who are academically at risk are identified early and are supported by a process that provides interventions based upon student needs and includes procedures for monitoring effectiveness.

Related Challenges:

 Establish a district system that fully ensures staff members in every school use standards aligned assessments to monitor student achievement and adjust instructional practices.

Indicators of Effectiveness:

Type: Annual

Data Source: PVAAS, Keystone, BAS, PSSAs

Specific Targets: 1. Increased proficient and advanced students

2. Students reading at grade level

3. Research based interventions for at risk students

4. Students show one year of growth on PVAAS

Strategies:

Data Analysis Procedures, Data-Informed Instruction, Data Teams & Data Warehousing

Description: Using Student Achievement Data to Support Instructional Decision Making provides a WWC reporting of various strategies related to the acquisition, analysis, and application of student data. (Source: http://ies.ed.gov/ncee/wwc/pdf/practice_guides/dddm_pg_092909.pdf)

SAS Alignment: Assessment, Instruction

Action Steps:

Systematic Intervention

Description:

Identify intervention groups based on data;

Identify research based intervention;

Train teachers;

Implement consistently

Start Date: 1/1/2014 End Date: 6/30/2018

Program Area(s): Professional Education

Supported Strategies: None selected

Goal #3: Establish a district system that fully ensures consistent implementation of standards aligned curricula across all schools for all students.

Indicators of Effectiveness:

Type: Annual

Data Source: Walk Trhoughs, Teacher Effectivness Evaluation Tool, teacher/classroom data for PVAAS, PSSAs, Keystone, BAS

Specific Targets: Based on teacher observation and student data, curriculum will be consistently delivered in classrooms as written.

Strategies:

Curriculum Mapping

Description: Empirical evidence of a positive statistical correlation of the use of curriculum mapping with student achievement is scarce. There was a 2001 study by the Indiana Center of Evaluation conducted for the Ohio DOE that determined curriculum alignment (defined as curriculum mapping with subsequent change in instructional practice) was the "single greatest factor in achieving improved test scores." The following link provides a list of resources supporting the positive contributions of curriculum mapping to educational processes: http://www.curriculummapping101.com/materials/curriculum-mapping-research; the following link provides an overview of curriculum mapping: http://en.wikipedia.org/wiki/Curriculum mapping

SAS Alignment: Standards, Materials & Resources

Action Steps:

Consistently Implement Curriculum

Description:

1. Walk Throughs and Evaluations will be reviewed to make sure that content that is being taught is in the assigned curriculum.

2. Principals will outline expectations.

3. Data Analysis will occur to identify weak areas in student assessment; teachers will identify where, when and how long those concepts were taught.

Start Date: 1/1/2014 **End Date:** 6/30/2018

Program Area(s):

Supported Strategies: None selected

Goal #4: Establish a district system that fully ensures the consistent implementation of effective instructional practices across all classrooms in each school.

Indicators of Effectiveness:

Type: Annual

Data Source: Walk Throughs and Teacher Effectiveness Evaluation Tool

Specific Targets: Teachers will implement District instructional initiatives with fidelity.

Strategies:

Technology Infrastructure Enhancement/Technology Access and Training Increase

Description: The International Society for Technology in Education cites research that indicates an increase in access to technology has a positive effect on student achievement. (Source: http://www.k12hsn.org/files/research/Technology/ISTE policy brief stu dent achievement.pdf)

SAS Alignment: Instruction, Materials & Resources

Differentiating Instruction

Description: Empirical validation of differentiated instruction as a package was not found; however, a large number of testimonials and classroom examples of positive effects have been reported. (Sources: Learning Styles: Concepts and Evidence,

http://www.psychologicalscience.org/journals/pspi/PSPI 9 3.pdf; Differentiated Instruction: Effective classroom practices report, http://www.cast.org/system/galleries/download/ncac/DifInstruc.pdf; Learning Styles, http://en.wikipedia.org/wiki/Learning styles#cite note-33; WWC: Assisting Students Struggling with Reading: Response to Intervention and Multi-Tier Intervention in the Primary Grades, http://ies.ed.gov/ncee/wwc/pdf/practice_guides/rti_reading_pg_021809. pdf Differentiated Instruction Reexamined, http://www.hepg.org/hel/article/499; Investigating the Impact of Differentiated Instruction in Mixed Ability Classrooms, http://www.icsei.net/icsei2011/Full%20Papers/0155.pdf)

SAS Alignment: Instruction

Full Day Kindergarten

Description: One study indicates Full-Day Kindergarten may not enhance achievement in the long term and may actually be detrimental to mathematics performance and non-academic readiness skills; the study indicates that the 5th grade achievement gap between white and black students is related to non-academic readiness skills possessed by students prior to entering kindergarten. (Source:

http://www.rand.org/pubs/monographs/2006/RAND_MG558.pdf) Another study indicates that low socioeconomic status minority students who attended full-day kindergarten performed statistically better in math and reading in third grade than did the identified students who attended half-day kindergarten.

http://opus.ipfw.edu/cgi/viewcontent.cgi?article=1009&context=spe

SAS Alignment: Instruction

Positive Behavior Support

Description: "Positive behavior support strives to use a system to understand what maintains an individual's challenging behavior...It also summarizes and creates a hypothesis about the behavior, and directly observes the behavior and takes data to get a baseline. The positive behavior support process involves goal identification, information gathering, hypothesis development, support plan design, implementation and monitoring...Strategies are needed that teachers and parents are able and willing to use and that have an impact on the child's ability to participate in community and school activities." (Source: http://en.wikipedia.org/wiki/Positive behavior support) Measures of fidelity of PBS implementation were established in 2009, which means that the correlation between fidelity of implementation and measures of student behavior (e.g. number of behavioral referrals) can and needs to be determined before PBS can be verified as having a statistically significant impact on student behavior. A number of tools provide indicators of implementation, but indicators of effectiveness remain to be verified. The following site provides technical information related to PBS. (Source: http://www.pbis.org/default.aspx) While empirical evidence is being developed regarding the effectiveness of School Wide PBS at the high school level, there is initial support for use of PBS in high schools. (Source: http://www.pbis.org/school/high_school_pbis.aspx)

SAS Alignment: Safe and Supportive Schools

Reading Across the Curriculum

Description: While there is a body of research that indicates employing the reading strategies of questioning, concept mapping, summarizing, and monitoring comprehension have been shown to have positive effects on reading achievement, there are no empirical studies that indicate Reading Across the Curriculum as a whole has a positive effect on achievement. (Source:

http://ies.ed.gov/ncee/edlabs/regions/southeast/pdf/REL 2007003.pdf)

SAS Alignment: Instruction

Action Steps:

Instructional Implementation

Description:

1. Clear expectations of expectations

2. Professional Development where needed

3. Monitoring of teachers by administration

4. Data analysis to identify effectiveness

Start Date: 1/1/2014 End Date: 6/30/2018

Program Area(s): Professional Education, Special Education, Educational Technology

Supported Strategies: None selected

App	endix:	Prof	ess	ion	al E	evelopment Action Step Details	
LEA Goal	s Addressec	#1 Es ensur t: stand stude practi	tablish es stat ards a nt achi ces.	n a dis ff men ligned ievem	trict sy nbers i asses ent and	stem that fully n every school use sments to monitor d adjust instructional	
Start	End		Title	•		Description 1. Alighn all curriculum, as applicable to PA Core Standards	
				- - - -		Identify common assessments in each grade level along with timeline as t assessments are given.	when
1/1/2014	6/30/2018	Increase	Student	Achen	/ement	3. Review data in a timely manner and make instructional adjustments inclu reteaching, tutoring, interventions, etc	ing
	Person Res Nancy Bown Curriculum [and building principals	sponsible nan, Director	SH 2	s	15 15	Provider Type Type Adminsitrators and Teacher Experts in the District a variety of the a variety of the above	App. No
	Knowledge	Ч	w to inc	rease st	tudent a	chievment in the classroom	
	Supportive Research	<u>C</u>	llize SAS,	, Harvar	d's Data	Wise process, differentiated instruction and researched based interventions.	
	Designed to ≯ For classr counselor	Accomplist oom teach s and educ	ן ers, sch ation	loo		Enhances the educator's content knowledge in the area of the educator's	

			s
			77
specialists:	certification or assi Increases th attention given to i Provides ed needed to analyze a	nment. Ie educator's teaching skills nterventions for struggling st ucators with a variety of cla: Ind use data in instructional	based on research on effective practice, with udents. ssroom-based assessment skills and the skills decision-making.
For school and district	Provides th assessments, curric interventions for sti academic standards	e knowledge and skills to thi ulum, instruction, staff profe uggling students are alignec	nk and plan strategically, ensuring that ssional education, teaching materials and I to each other as well as to Pennsylvania's
educators seeking leader roles:	rship decision-making. Instructs th	iders with the ability to acce e leader in managing resour	ss and use appropriate data to inform ces for effective results.
Training Format	LEA Whole Group Presentatic School Whole Group Present Department Focused Present Professional Learning Comm	n ation nities	
ż	Classroom teachers Principals / Asst. Principals Supt / Ast Supts / CEO / Ex		Elementary - Primary (preK - grade 1) Elementary - Intermediate (grades 2-5)
Participant Roles	School counselors Paraprofessional	Grade Levels	Mildule (grades 9-12) High (grades 9-12)
Follow-up Activities	Team development and	Evaluation Methods	Classroom observation focusing on

laring of content-area lesson	nplementation outcomes, with	wolvement of administrator and/or	eers	Analysis of student work,
sharing of content	implementation o	involvement of ad	peers	Analysis o

Analysis of student work, with administrator and/or peers Creating lessons to meet varied student learning styles

factors such as planning and preparation, knowledge of content, pedagogy and standards, classroom environment, instructional delivery and professionalism. Student PSSA data Standardized student assessment data other than the PSSA Classroom student assessment data

LEA Goal	s Addressed:	#1 Es ensur risk a a proq upon proce	tablis es stu re ide cess t stude dures	h a dis udents ntified hat pro nt nee for me	trict sy who a early a pvides ds and onitori	stem that fully re academically at and are supported by interventions based includes ng effectiveness.		
Start	End		Tit	<u>e</u>		Description Identify intervention groups based on data;		
4 FOCI FI F			-1 - 1 - 1	4		Identify research based intervention;		
1/1/2014	0107/06/0	oyster		nterven	LION	Train teachers;		
						Implement consistently		
	Person Respo Building Princip	o nsible pals	2.0 2.0	s 0	EP	Provider School District	Type a variety	App. No.
	ō						of the above providers	

	Intervention pra	actices;
Knowledge	Grouping of stud	ents;
	Data analysis	
Supportive Research	Interventions wil	ll be chosen to match the students' needs
Designed to Accon	ıplish	
For classroom t counselors and specialists:	eachers, school education	Enhances the educator's content knowledge in the area of the educator's certification or assignment. Increases the educator's teaching skills based on research on effective practice, with attention given to interventions for struggling students. Provides educators with a variety of classroom-based assessment skills and the skills needed to analyze and use data in instructional decision-making.
For school and	district	Provides the knowledge and skills to think and plan strategically, ensuring that assessments, curriculum, instruction, staff professional education, teaching materials and interventions for struggling students are aligned to each other as well as to Pennsylvania's academic standards.
administrators, a educators seeki roles:	and other ing leadership	Provides leaders with the ability to access and use appropriate data to inform decision-making. Empowers leaders to create a culture of teaching and learning, with an emphasis on learning.
Training Format	LEA Wh School Departn	ole Group Presentation Whole Group Presentation nent Focused Presentation

	5 8 5		
Participant Roles	Classroom teachers Principals / Asst. Principals Supt / Ast Supts / CEO / Ex Dir Paraprofessional	Grade Levels	Elementary - Primary (preK - grade 1) Elementary - Intermediate (grades 2-5) Middle (grades 6-8) High (grades 9-12)
Follow-up Activities	Team development and sharing of content-area lesson implementation outcomes, with involvement of administrator and/or peers Analysis of student work, with administrator and/or peers Creating lessons to meet varied student learning styles	Evaluation Methods	Classroom observation focusir factors such as planning and preparati knowledge of content, pedagogy and standards, classroom environment, instructional delivery and professional Student PSSA data Standardized student assessm data other than the PSSA Classroom student assessment

LEA Goals Start	s Addressed: End	effective instructional pr classrooms in each scho Title	nplementation of actices across all ool. Description 1. Clear expectations of expectations
1/1/2014	6/30/2018	Instructional Implementation	2. Professional Development where needed

		81
		3. Monitoring of teachers by administration
Person Responsible SH S Building Principals 2 10	8 B	 4. Data analysis to identify effectiveness Provider District District District App. Variety of No Providers such as U, U, U, U, U, ts, and teacher leaders
Knowledge Deep understa	nding of st	ategy and implementation with fidelity
Supportive All instructiona Research	ll initatives	are research based
Designed to Accomplish		
For classroom teachers, school counselors and education specialists:	certific attenti needec	Enhances the educator's content knowledge in the area of the educator's ation or assignment. Increases the educator's teaching skills based on research on effective practice, with on given to interventions for struggling students. Provides educators with a variety of classroom-based assessment skills and the skills to analyze and use data in instructional decision-making.
For school and district administrators, and other educators seeking leadership roles:	assessn interve acaden decisio	Provides the knowledge and skills to think and plan strategically, ensuring that nents, curriculum, instruction, staff professional education, teaching materials and ntions for struggling students are aligned to each other as well as to Pennsylvania's nic standards. Provides leaders with the ability to access and use appropriate data to inform n-making.

		ά.		82
		Empowers le learning. Instructs the	eaders to create a culture of leader in managing resourc	f teaching and learning, with an emphasis on ces for effective results.
Training Format		LEA Whole Group Presentatio School Whole Group Presenta Department Focused Presenta Professional Learning Commu	n ation nities	
Participant Roles	ğ	Classroom teachers Principals / Asst. Principals Supt / Ast Supts / CEO / Ex School counselors Paraprofessional	Grade Levels	Elementary - Primary (preK - grade 1) Elementary - Intermediate (grades 2-5) Middle (grades 6-8) High (grades 9-12)
Follow-up Activities	sharing implem involve peers with ad varied s discussi	Team development and t of content-area lesson nentation outcomes, with ment of administrator and/or Analysis of student work, lministrator and/or peers Creating lessons to meet student learning styles Peer-to-peer lesson ion	Evaluation Methods	Classroom observation focusing on factors such as planning and preparation, knowledge of content, pedagogy and standards, classroom environment, instructional delivery and professionalism. Student PSSA data Standardized student assessment data other than the PSSA Classroom student assessment data

District Level Affirmations

We affirm that this District Level Plan was developed in accordance, and will comply with the applicable provisions of 22 Pa. Code, Chapters 4, 12, 16, and 49. We also affirm that the contents are true and correct and that the plan was placed for public inspection in the school district/AVTS offices and in the nearest public library until the next regularly scheduled meeting of the board or for a minimum or 28 days whichever comes first.

We affirm that the responses in the Professional Education Core Foundations and the Professional Development Action Steps focus on the learning needs of each staff member to enable all staff members meet or exceed the Pennsylvania academic standards in each of the core subject areas.

No signature has been provided

Board President

No signature has been provided

Chief School Administrator

Special Education Affirmations

We also affirm our understanding that any requests for any deviations from the Chapter 14 regulations, standards, policies, and procedures must be made in writing to the Pennsylvania Department of Education. The school district understands that the Special Education Component of the District Level Plan will be approved by PDE in accordance with the following criteria as set forth in 22 Pa. School Code § 14.104 and as part of the District Level Plan:

- 1. There are a full range of services, programs and alternative placements available to the school district for placement and implementation of the special education programs in the school district.
- 2. The school district has adopted a child find system to locate, identify and evaluate young children and children who are thought to be a child with a disability eligible for special education residing within the school district's jurisdiction. Child find data is collected, maintained, and used in decision-making. Child find process and procedures are evaluated for its effectiveness. The school district implements mechanisms to disseminate child find information to the public, organizations, agencies, and individuals on at least an annual basis.
- 3. The school district has adopted policies and procedures that assure that students with disabilities are included in general education programs and extracurricular and non-academic programs and activities to the maximum extent appropriate in accordance with an Individualized Education Program.
- 4. The school district will comply with the PA Department of Education, Bureau of Special Education's revision notice process.
- 5. The school district follows the state and federal guidelines for participation of students with disabilities in state and district-wide assessments including the determination of participation, the need for accommodations, and the methods of assessing students for whom regular assessment is not appropriate.
- 6. The school district affirms the Pennsylvania Department of Education that funds received through participation in the medical assistance reimbursement program, ACCESS, will be used to enhance or expand the current level of services and programs provided to students with disabilities in this local education agency.

No signature has been provided

Board President

No signature has been provided

Chief School Administrator

SECTION 3 – DISTRICT ENROLLMENT

Section 3 constitutes an overview of the school district's enrollment. The current enrollment as well as projected enrollment is provided to develop a trend for the capacity of the district's facilities. This information is used to determine the needed capacity of the District buildings now and in the future. Closing buildings or grade-realignments should consider this information when exploring options.

DISTRICT ENROLLMENT INTRO

page 2

DISTRICT ENROLLMENT

District Enrollment Summary	page 3
PDE Enrollment Projections	page 4
Enrollment comparisons	page 5



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 3 - ENROLLMENT Page 1 of 5

<u>District Enrollment</u>

Anticipation of the student population is critical to the planning of the entire educational process. Enrollment projections have been and will continue to be the most important planning tool for the administrators. Without them, adequate preparations for curriculum, staff assignments, transportation, operation, and budget cannot be made.

Five year projections have been customary for the year to year operating decisions. Longer projections require periodic updating to adjust for interim fluctuations and maintain reasonable accuracy. While the longer projections are more vulnerable to unforeseen events and circumstances, they are necessary to evaluate any commitment to a building program that could affect the district for the next 20 to 30 years. The Department of Education in the past has required enrollment projection data by grades for 10 years hence.

Most population estimates are based on recent history or "trends". Extrapolation of these trends then produces an expected future progression. Modifications to account for conditions that can effect migration or birth rate might refine the results but there are limitations (which increase with the length of the forecast) to any of the accepted methods.

The enrollment projection model used by the Pennsylvania Department of Education is based on the "retention" theory that students' historical progression to the next grade is influenced by factors that will continue in the future. See the following pages for current enrollment and the most recent PDE Enrollment Projections. The PDE projections are only current to 2012, therefore the projected data will be more useful. The projections have not been updated since 2012 so the current enrollment may be the most accurate means of planning for the District.



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 3 - ENROLLMENT Page 2 of 5

District Enrollment Summary

Date: (Time:1	05/18/2015 13:50:48				2014-	-2015 Bla Enr Report I	ckhawk S oliment Ta Date: 05/1	chool Dist ally 8/2015	rict					En	Page: 1 /oliTally v1.0.3
Schoo	Hai 0	f Full	,	2	3	4		6	7		0	10	11	12	School
010%	NORTHWESTERN P	RIMARY		-			5			0		10			1041
	Male	53	55	51											159
	Female	53	56	56											165
	Total:	106	111	107											324
020	PATTERSON PRIMA	ARY													
	Male	28	33	39											100
	Female	39	41	44											124
	Total:	67	74	83											224
030	BLACKHAWK INTE	RMEDIATE													
	Male	10		1	77	90	92								270
	Female	4			86	91	86								267
	Total:	14		1	163	181	178								537
031	pre-K INTERMED Male Female														0
	Total:														0
050	HIGHLAND MIDDL	E													
	Male							101	99	81					281
	Female							97	93	74					264
	Total:							198	192	155					545
080	BLACKHAWK HIGH Male Female	I									123 107	100 88	90 109	69 97	382 401
	Total:										230	188	199	166	783
090	Blackhawk OSP Male Female	5			5		2	2	2	1	3	2	1	9	30
	Total:	5			5		2	2	3	1	3	2	4	14	41
115	MGMH Male Female Total:							-	-	-	-				0



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 3 - ENROLLMENT Page 3 of 5

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Pennsylvania Department of Education Enrollment Projections (Dated 07/2012)

Revised: 7/2012 (2011 Enrollments) Enrollment Projections Prepared by the Pennsylvania Department of Education (717) 787-2644 Blackhawk SD 1-27-04-160-3 1____ _____6 8____ 9 10 11 YEAR ĸ 4 5 ____7____ 12 Total 2007-2008 2008-2009 2009-2010 2010-2011 171 173 217 180 221 223 2011-2012 148 192 156 219 215 180 226 PROJECTIONS 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 190 187 2019-2020 2020-2021 170 178 177 179 178 179 212 203 197 181 2021-2022 171 179 180 180 213 211 211 191

				Va	rious Grad	le Grouping	gs of the En	rollment	Projection	5						
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
2011-2012	861	1017	1236	1427	1642	1822	2459	781	625	406	805	586	1223	1032	817	637
2016-2017	937	1123	1300	1474	1667	1873	2415	730	544	367	750	573	1115	941	748	542
2021-2022	888	1068	1248	1461	1672	1883	2399	784	604	424	815	635	1151	938	727	516
2011-2012 to	2021-202	22														
Change	27	51	12	34	30	61	-60	3	-21	18	10	49	-72	-94	-90	-121
Percent	3.1	5.0	1.0	2.4	1.8	3.3	-2.4	0.4	-3.4	4.4	1.2	8.4	-5.9	-9.1	-11.0	-19.0
							100000000000000000000000000000000000000									

According to the Pennsylvania Department of Education projections, the district enrollment is decreasing over the next 6 years by 2.4%. These trends are important to consider when exploring options for future projects including consolidation and re-alignment.



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 3 - ENROLLMENT Page 4 of 5

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Enrollment Comparisons

The tables below compare the current enrollment in the District against the PDE Projected enrollment 6 years in the future for the years 2021-2022. This information is critical in understanding the size of the district facilities that will be needed in the future to accommodate a (projected) enrollment.

Elementary School (K-2)

Current Enrollment (2015)	562		
Projected Enrollment (2021/2022)	529		
Anticipated Change	-33	Percent Growth (%)	- 6 %

Intermediate School (3-5)

Current Enrollment (2014)	522		
Projected Enrollment (2021/2022)	539		
Anticipated Change	+ 17	Percent Growth (%)	+3%

Middle School (6-8)

Current Enrollment (2014)	545		
Projected Enrollment (2021/2022)	604		
Anticipated Change	+ 59	Percent Growth (%)	+11%

High School (9-12)

Current Enrollment (2014)	783		
Projected Enrollment (2021/2022)	727		
Anticipated Change	-56	Percent Growth (%)	-7%



SECTION 4 – BUILDING CAPACITIES

Section 4 constitutes an analysis of the District's buildings and their capacities. The method in describing the building's capacities follows the guidelines set forth by the Pennsylvania Department of Education, District Wide Facility Study. The information contained on the following pages updates the information from the previous District Wide Facility Study as prepared by Hayes Large and Burt Hill. The current enrollments, grade alignments and building utilizations are taken into account to determine the capacities of the district buildings.

From the Department of Education District Wide Facility Study guidelines:

- An analysis of each building's capacity as it relates to the educational program. The analysis must address:
 - a. how many students a building can house
 - b. the types of educational spaces required by the educational program described above
 - c. grade alignments
 - d. length of the school day and number of classes per day, if applicable
 - e. size of particular rooms and adequacy of those rooms, if applicable.

BUILDING CAPACITIES

Northwestern Primary Center	pages 2
Patterson Primary Center	pages 3
Blackhawk Intermediate School	pages 4
Highland Middle School	pages 5
High School	pages 6


Northwestern Primary Center

Grades: K-2

77,000 sf Existing Building Capacity

		ELEMEN	TARY BUI	LDING CAPA	CITY							
District (200) Blackhawk School District K - 2								2				
		SCHOOL:	Pa	tterson Prim	ary	Π	SCHOOL: Northwestern Primaryl					
		PRES	ENT	PLAS	NED	H	PRES	ENT:	PL	ANNED		
#1	Ø2	- 43	64	85	#6		#3	\$ 4	#5	#6		
NAME OF SPACE	UNIT FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP		NUMBER OF UNITS	POTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP		
HALF-TIME KINDRGRIN	50					1						
FULL-TIME KINDRGRTN	25	4	100	4	100	11	5	125	5	125		
REG CLSRM 660+ SQ FT	25	7	175	7	175	11	13	325	13	325		
OTHER:												
BUILDING TOTAL	XX	XXXXXX	275	XXXXXX	275		XXXXXX	450	XXXXXX	450		
		SCHOOL:	Black	hawk Interm	ediate	H	SCHOOL 1					
		PRES	ENT	PLAS	NED	11	PRES	TWE	PL	ANNEED		
#1	#2	- #3	84	#5	#6	11	83	물식	#5	#6		
NAME OF SPACE	UNIT FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUIBER OF UNITS	TOTAL FTE CAP		NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UN175	TOTAL FTE CAP		
HALF-TIME KINDRGRTN	50					11						
FULL-TIME KINDRGRIN	25					11						
REG CLSRM 660+ SQ FT	25	24	600	24	600	1 [
OTHER:						1						
BUILDING TOTAL	XX	XXXXXX	600	XXXXXX	600		XXXXXX		XXXXXX			

Current Building Enrollment

Date: 05/18/2015 Time: 13:50:48					2014-2015 Blackhawk School District Enrollment Tally Report Date: 05/18/2015									En	Page: 1 rollTally v1.0.3
	Half	Full				•									School
School	0	0	1	2	3	4	5	6	7	8	9	10	11	12	Total
010 NORTHWI	STERN PRI	MARY													
Male		53	55	51											159
Fema	le	53	56	56											165
Total		106	111	107											324

Northwestern Primary Center - Capacity summary

The building capacity based on the PA Department of Education's FTE (Full Time Equivalent) calcuations is 450 students. The current enrollment for the building is 324 students. The building is therefore utilizing 72% of its maximum capacity.

The current classroom configuration, shared spaces and support spaces is adequate to support the District's educational program for this grade grouping. If the educational programing is to be modified in the future, the spaces within this building should be evaluated to determine if any modifications are required to support the educational goals of the District.



Patterson Primary Center

Grades: K-2 28,230 sf

Existing Building Capacity

		ELEMEN	TARY BUIL	LDING CAPA	CITY						
Blackhawk School District			Project Name Northweste	: rn Primary S	chool			Grades: K	- 2		
		SCHOOL:	Pa	tterson Prim	ary	SCHOOL:	CHOOL : Northwestern Primaryl				
		PRES	ENT	PLAS	058D	PRES	ZNT	PL	ANNED		
#1	# 2	#3	#4	#S	#6	#3	#4	#5	#6		
NAME OF SPACE	UNIT FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	POTAL PTE CAP	NUMBER OF UNITS	TOTAL FTE CAF		
HALF-TIME KINDRGRTN	50										
FULL-TIME KINDRGRTN	25	4	100	4	100	5	125	5	125		
REG CLSRM 660+ SQ FT	25	7	175	7	175	13	325	13	325		
OTHER:											
BUILDING TOTAL	XX	XXXXXX	275	XXXXXX	275	XXXXXX	450	XXXXXX	450		
		SCHOOL:	Black	hawk Interm	ediate	SCHOOL 1					
		PRES	ENT	PLAS	NED	PRES	TWE	PLANNED			
#1	#2	#3 ·	84	#5	#6	83	무식	#5	#6		
NAME OF SPACE	UNIT FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUIBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FIE CAP	NUMBER OF UN175	TOTAL FTE CAP		
HALF-TIME KINDRGRTN	50										
FULL-TIME KINDRGRTN	25										
REG CLSRM 660+ SQ FT	25	24	600	24	600						
OTHER:											
BUILDING TOTAL	XX	XXXXXX	600	XXXXXX	600	XXXXXX		XXXXXX			

Current Building Enrollment

And the second s					
020	PATTERSON PRIMARY				
	Male	28	33	39	100
	Female	39	41	44	124
	Total:	67	74	83	224

Patterson Primary Center - Capacity summary

The building capacity based on the PA Department of Education's FTE (Full Time Equivalent) calcuations is 275 students. The current enrollment for the building is 224 students. The building is therefore utilizing 82% of its maximum capacity.

The current classroom configuration, shared spaces and support spaces is adequate to support the District's educational program for this grade grouping. The building is utilized at a higher capacity than the other Primary Center and therefore grade level changes or additional programs for this building should be considered closely. If the educational programing is to be modified in the future, the spaces within this building should be evaluated to determine if any modifications are required to support the educational goals of the District.



Blackhawk Intermediate School

Grades: 3-5 94,300 sf

Existing Building Capacity

		ELEMEN	TARY BUI	LDING CAPA	CITY							
Blackhawk School District			Project Name Northweste	Graden: K	2							
		SCHOOL:	Pa	tterson Prim	ary	Π	SCHOOL:	No	Northwestern Primaryl			
		PRE	SENT	PLAS	OSED		PRES	ENT:	PL	ANNED		
#1	#2	_ #3	64	¥5	#6		43	#4	#5	#6		
NAME OF SPACE	UNIT FTE CAP	NUMBER OF UNITS	TOTAL ETE CRP	NUMBER OF UNITS	TOTAL FTE CAP		NUMBER OF UNITS	POTAL FTE CAF	NUMBER OF UNITS	TOTAL FTE CAP		
HALF-TIME KINDRGRTN	50											
FULL-TIME KINDRGRTN	25	4	100	4	100		5	125	5	125		
REG CLSRM 660+ SQ FT	25	7	175	7	175		13	325	13	325		
OTHER:	_											
BUILDING TOTAL	XX	XXXXXX	275	XXXXXXX	275		XXXXXX	450	XXXXXX	450		
		SCHOOL:	Black	hawk Interm	ediate		SCHOOL 1					
		FRE	TKES	PLAS	DIED	1	PRES	TWE	PLANEED			
#1	#2	#3	94	#5	#6		83	문식	#5	#6		
NAME OF SPACE	UNIT FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUIBER OF UNITS	TOTAL FTE CAP		NUMBER OF UNITS	TOTAL STE CAD	NUMBER OF UN175	TOTAL FTE CAP		
HALF-TIME KINDRGRIN	50											
FULL-TIME KINDRGRTN	25											
REG CLSRM 660+ SQ FT	25	24	600	24	600							
OTHER:												
BUILDING TOTAL	XX	XXXXXX	600	XXXXXX	600		XXXXXX		XXXXXX			

Current Building Enrollment

	Contraction in the second state of the second	and see a local distance of the second se						
030	BLACKHAWK INTH	ERMEDIATE						
	Male	10	1	77	90	92	270	
	Female	4		86	91	86	267	
	Total:	14	1	163	181	178	537	

Blackhawk Intermediate School – Capacity summary

The building capacity based on the PA Department of Education's FTE (Full Time Equivalent) calcuations is 600 students. The current enrollment for the building is 537 students. The building is therefore utilizing 89% of its maximum capacity.

The current classroom configuration, shared spaces and support spaces is adequate to support the District's educational program for this grade grouping. The building is utilized at a higher capacity than the other Primary Center and therefore grade level changes or additional programs for this building should be considered closely. If the educational programing is to be modified in the future, the spaces within this building should be evaluated to determine if any modifications are required to support the educational goals of the District.



Highland Middle School

Grades: 6-8 137,409 sf

Existing Building Capacity

M	IDDLE/	SECONDARY	BUILDING	CAPACIT	TY							
Blackhawk School District			Project Bane Northweste	, rn Primary	School			Grades:	- 2			
		SCHOOL:	Highland M	iddle Schor	ol	SCHOOL: Blackhawk High School						
		PRE	SENT	FLANNED		PRE	SENT	PLANNED				
#1	#2	#3	#4	#5	#6	#3	#4	45	#6			
	UNIT	NUMBER	TOTAL	NUMBER	TOTAL	NUMBER	TOTAL	NUMBER	TOTAL			
NAME OF SPACE	CAP	UNITS	CAP	UNITS	CAP	UNI75	CAP	UNITS	CAP			
REG CLSRM 660+ SQ FT	25	24	600	24	600	26	650	26	650			
SCIENCE CLSRM 660+ SQ FT	25					5	125	5	125			
SCIENCE LAB 660+ SQ FT	20	4	80	4	80	3	60	3	60			
PLANETARIUM W/CLSRM 660+ SQ FT	20											
ALTERNATIVE ED ROOM 660+ SQ FT	20											
BUSINESS CLSRM 660+ SQ FT	25					2	50	2	50			
BUSINESS LAB 660+ SQ FT	20					3	60	3	60			
COMPUTER LAB 660+ SQ FT	20	3	60	3	60							
TV INSTRUCTIONAL STUDIO 660+ SQ FT	20											
ART CLASSROOM 660+ SQ FT	20	1	20	1	20	3	60	3	60			
MUSIC CLASSROOM 660+ SQ FT	2.5	1	25	1	25							
BAND ROOM 660+ SQ FT	25	1	25	1	25	1	25	1	25			
ORCHESTRA ROOM 660+ SQ FT	25											
CHORAL ROOM 660+ SQ FT	25	1	25	1	25	1	25	1	25			
FAMILY/CONSMR SCIENCE 660+ SQ FT	20	1	20	1	20	3	60	3	60			
IA/SHOP 1800+ SQ FT	20					2	40	2	40			
TECH ED 1800+ SQ FT	20	1	20	1	20							
VO AG SHOP W/CLSRM 660+ SQ FT	20											
DRIVER'S ED 660+ SQ FT	20					· ·						
GYM 6500-7500 SQ FT	66					1.0	66	1.0	66			
AUX GYM 2500 SQ FT	33											
OTHER:												
OTHER:												
BUILDING TOTAL	XXX	XXXXXX	875	XXXXXX	875	XXXXX	1,221	XXXXXX	1,221			
MS/SEC UTILIZATION (BLDG TOTAL X .9)	XXX	XXXXXXX	788	XXXXXX	788	XXXXX	1,099	COOCXX	1,099			

Current Building Enrollment

050	HIGHLAND MIDDLE				
	Male	101	99	81	281
	Female	97	93	74	264
	Total:	198	192	155	545

Highland Middle School – Capacity summary

The building capacity based on the PA Department of Education's FTE (Full Time Equivalent) including the .9 ms/sec utilization factor is 788 students. The current enrollment for the building is 545 students. The building is therefore utilizing 69% of its maximum capacity.

The current classroom configuration, shared spaces and support spaces is adequate to support the District's educational program for this grade grouping. The building is utilized at a lower capacity and therefore grade level changes or additional programs may be accommodated easily in this building. If the educational programing is to be modified in the future, the spaces within this building should be evaluated to determine if any modifications are required to support the educational goals of the District.



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY SECTION 4 – BUILDING CAPACITIES Page 5 of 6

Blackhawk High School

Grades: 9-12 210,000 sf

Existing Building Capacity

MI	DDLE/	SECONDARY	BUILDING	CAPACIT	Y					
Blackhawk School District			Project Name Northweste	rn Primary	School			Grades: <u>K·2</u>		
		SCHCOL:	Highland M	iddle Schor	k	SCHOOL;	Blackhawk	High School	1	
		PRE	IENT	PLA	NNED	PRZ	BENT	PLANNED		
#1	#2	#3	#4	#5	#6	#3	#4	45	#6	
	UNIT	NUMBER OF	TOTAL	NUMBER.	TOTAL	NUMBER	TOTAL	NUMBER	TOTAL	
MAME OF SDATE	CAP	UNITS	CAP	UNITS	CAP	TINT75	ChP	INTRE	CAR	
REG CLSRM 660+ SQ FT	25	24	600	24	600	26	650	26	650	
SCIENCE CLSRM 660+ SQ FT	25					5	125	5	125	
SCIENCE LAB 660+ SQ FT	20	4	80	4	80	3	60	3	60	
PLANETARIUM W/CLSRM 660+ SQ FT	20									
ALTERNATIVE ED ROOM 660+ SQ FT	20									
BUSINESS CLSRM 660+ SQ FT	25					2	50	2	50	
BUSINESS LAB 660+ SQ FT	20					3	60	3	60	
COMPUTER LAB 660+ SQ FT	20	3	60	3	60					
TV INSTRUCTIONAL STUDIO 660+ SQ FT	20									
ART CLASSROOM 660+ SQ FT	20	1	20	1	20	3	60	3	60	
MUSIC CLASSROOM 660+ SQ FT	2.5	1	25	1	25					
BAND ROOM 660+ SQ FT	25	1	25	1	25	1	25	1	25	
ORCHESTRA ROOM 660+ SQ FT	25									
CHORAL ROOM 660+ SQ FT		1	25	1	25	1	25	1	25	
FAMILY/CONSMR SCIENCE 660+ SQ FT	20	1	20	1	20	3	60	3	60	
IA/SHOP 1800+ SQ FT	20					2	40	2	40	
TECH ED 1800+ SQ FT	20	1	20	1	20					
VO AG SHOP W/CLSRM 660+ SQ FT	20									
DRIVER'S ED 660+ SQ FT	20									
GYM 6500-7500 SQ FT	66					1.0	66	1.0	66	
AUX GYM 2500 SQ FT	33									
OTHER:										
OTHER:										
BUILDING TOTAL	XXX	XXXXXX	875	XXXXXX	875	XXXXX	1,221	CXXXXX	1,221	
MS/SEC UTILIZATION (BLDG TOTAL X .9)	ххх	XXXXXXX	788	XXXXXX	788	XXXXX	1,099	000000	1.099	

Current Building Enrollment

080 BLACKHAWK HIGH						
Male		12	3 10	0 90	69	382
Female		10	7 1	88 109	97	401
Total:		23	0 18	199	166	783

Highland Middle School – Capacity summary

The building capacity based on the PA Department of Education's FTE (Full Time Equivalent) including the .9 ms/sec utilization factor is 1099 students. The current enrollment for the building is 783 students. The building is therefore utilizing 71% of its maximum capacity.

The current classroom configuration, shared spaces and support spaces is adequate to support the District's educational program for this grade grouping. The building is utilized at a lower capacity and therefore grade level changes or additional programs may be accommodated easily in this building. If the educational programing is to be modified in the future, the spaces within this building should be evaluated to determine if any modifications are required to support the educational goals of the District.



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY SECTION 4 – BUILDING CAPACITIES Page 6 of 6

SECTION 5 – EXISTING FACILITIES

Section 5 constitutes an analysis of District's buildings. The existing facilities are evaluated based on the following criteria. Recommendations are made based on the evaluations specific to ongoing maintenance, and upgrades required to bring the buildings to the current code standards. Following the evaluations a section on probable costs for upgrades is provided.

From the Department of Education District Wide Facility Study guidelines:

```
5. An analysis of <u>each</u> building's condition. The analysis must address:
a. the building's physical condition
b. the projected useful life of each building's major components
(electrical, HVAC, plumbing, etc.)
c. code violations
d. universal accessibility
```

- e. Energy Portfolio Surveys
- f. the cost to upgrade each building to current standards.

Existing Facilities

Northwestern Primary Center Patterson Primary Center Blackhawk Intermediate School Highland Middle School High School Darlington Athletic Building Maintenance Building

Probable Costs	Pages 1 -2
Energy Studies	Pages 1 - 6



NORTHWESTERN PRIMARY SCHOOL

256 Elmwood Blvd Darlington, PA 16115 Phone: 724-827-2116 Fax: 724-827-8294 Principal: Mrs. Carol Sprinker

Front Façade Image



Aerial Photo





BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 - NORTHWESTERN PRIMARY SCHOOL Page 1 of 18

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First Floor Plan



<u>Timeline</u> Original Building: 1955 Renovations and Capital Improvements: 1961, 1999, 2000, 2004, 2007, 2010 and 2014

Current Enrollment : Grades K-2, 327 Students

Building Square footage: 77,000sf

Condition Commentary Overview

Northwestern Primary School was originally constructed as a high school in 1955. The building was then converted to a primary school in which to accommodate grades k-2. The original design for a high school provides some spaces that are not appropriately sized for a primary school program. The building has undergone multiple renovation and improvement projects over the years. The enrollment in the building currently leaves multiple spaces underutilized, thus creating operational costs for square footage that is not currently needed to deliver the educational program to the students. The district's football stadium and wrestling facility is also located on this site. Over the years the building has had issues with steam line breaks that cause water damage and the possibility of mold growth. The issues have been addressed by the district on a case by case basis in order to maintain the safety of the occupants and visitors.

Site Accessibility

The site circulation is relatively confusing in its current configuration. The circulation patterns of the site are complicated further by the need to provide parking and access to the athletic facilities and stadium on the site while the building is still being occupied during school hours. Accessibility is relatively good around the site. There are accessible entrances at various locations around the building. The items listed below highlight some deficiencies and should be considered when doing a renovation project or included in capital improvements.

- Site circulation is extremely confusing in its current configuration. The use of more significant site signage and means of wayfinding would improve the awareness of the circulation patterns and make for a much safer experience. Code compliant signage should be provided at each entrance to the building.
- Some exterior entrance/exit doors have a small step at the threshold which will not meet current accessibility codes. Other entrances are on grade with a flush condition thus meeting the accessibility requirements of the code.
- The main building entrance is accessible with the use of a curb ramp that replaces a portion of the steps. The ramp does not meet current accessibility codes due to the fact that there are no handrails on either side of the ramp.
- Accessible parking spaces are located in close proximity to the main entrance to the building. The number of accessible parking spaces may be too few given the number of students and staff in the building. The current zoning requirements can be reviewed to confirm the required number of accessible spaces.
- The sidewalk components around the building appear to be code compliant. The slopes are within code tolerances and there are tactile warning strips provided at the end of the sidewalks where they connect to vehicular driveways.
- The rear entrance/exits from the classroom wings have newly installed concrete sidewalks that appear to be steep enough to be considered ramps. These components are not currently code compliant since they do not have handrails provided at the sides of the ramps.
- The accessible route from the main building to the bleachers is adequate. There is a top platform that would accommodate the wheelchair spectator seating area.
- The accessible parking spaces and accessible route to the bleachers during an athletic event is not ideal and could be improved by pavement markings, site circulation modifications and signage.
- The walkway from the ticket booth into the stadium is gravel and not currently accessible. The accessible route to the top section of the bleachers is code compliant as long as the gates and fencing allow access by patrons to this area of the site.



Main entry ramp - no handrails



Non accessible step



Accessible entrance



Tactile warning strips



Non accessible - no handrails



Gravel walkway to stadium



Building Accessibility

- Accessible circulation inside the building is quite good throughout the corridors and classrooms. The fact that the building is one story helps with the ease of accessible circulation.
- Throughout the building the classroom sinks are not accessible and are located in casework that does not provide a knee space for wheelchair front approach access. In many locations the sink and casework are configured in such a way that a side approach/reach will not even work.
- The classroom built in casework is not accessible due to the size, configuration and reach ranges. While some efforts have been made to locate soap dispensers and paper towel dispensers at lower levels, a more comprehensive approach could be combined with providing new casework and accessible sinks.
- The main public toilet rooms are not accessible. The size of the space does not allow adequate clearance for persons in a wheelchair. The toilet stalls are not large enough to meet code and they also do not have the required handrails. In order to reconfigure the toilet rooms to meet code a significant renovation would be required to provide the space needed. Adjacent spaces would be impacted by this reconfiguration by potentially taking square footage from the adjacent rooms.
- Single user toilet rooms are most likely not large enough to meet the current codes. These toilet rooms would need to be made larger to provide the required clear floor areas around the fixtures. Grab bars and piping guards will need added to these spaces.
 - It is noted that one public accessible toilet room has been provided off of the main entry lobby. This space is a unisex toilet room that appears to meet code.
- The corridor lockers do not appear to have specific accessible units located within the overall number of lockers. Typically 5% of all lockers need to be accessible with appropriate signage.
- New water coolers have been added to the building to address water quality issues. These coolers are generally accessible by a side approach.
- Door hardware throughout the building consists of non-accessible types. The non-accessible hardware should be replaced with code compliant units.
- Accessible signage is not provided consistently throughout the building. Some signage while in place is mounted too high and thus not compliant with reach ranges. A thorough evaluation of what signage is compliant and not should take place.
- The locker rooms and shower rooms are not accessible. There are currently curbs isolating the shower area. The curbs would need removed to provide access while water flow control could be achieved by installing low profile ADA compliant curbs and/or trench drains.
- Accessibility to the cafeteria serving line is not code compliant. The District has put in place a portable ramp and riser system that provides better access but the system in place is not compliant. A more significant ramp and railing system would be required to provide access to the level of the serving counter.





Non accessible sinks



Non accessible door hardware



Non accessible urinals



No accessible signage at doors



Non accessible tlt. Stalls



Ramps at serving counter

Means of Egress

The means of egress from the building is generally adequate based on separation distance and quantity. There are egress deficiencies throughout the building that should be noted.

- Exterior exit doors generally have the required panic hardware. However the panic hardware is quite old and is in need of adjustment. If the doors are to be replaced with new units, the hardware should be replaced as well.
- Tactile exit signage is not provided at the exterior egress doors.
- The exit doors are fully glazed and may not contain safety rated glazing. This could pose a safety issue during an evacuation event. The glazing in the doors could be replaced with rated safety glazing. Alternatively, the doors could be replaced with new units.

Safety and Security

Safety and security for the building is a substantial deficiency that should be addressed if the building is to be utilized in the future.

- The main entrance vestibule is located adjacent to the main office however there is not a direct physical connection to the office. Visitors must exit the vestibule into the main lobby before entering the office. A revision to this layout is recommended to extend the entry vestibule into the lobby to provide a direct doorway connection into the main office. This extended vestibule would need to take into account a gymnasium entry/exit door. Ideally the main office would be directly connected to the main entrance vestibule which would provide direct view of the visitors at the door as well as a means for visitors to pass through the office before entering the main corridors. The gymnasium door could be converted to exit only and still be located within the newly expanded vestibule.
- There are side entrances into the building that are utilized for entry by students. These entrances are typically controlled by staff members during arrival and drop off. Outside of these times, these doors should remain locked and signage provided to direct visitors to the main entrance.
- There is currently a very limited access control system used in the building. The existing system should be evaluated to determine what upgrades are required to provide improved
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access control and safety. Upgraded access control systems should be provided at the main entrance doors. The system should include at a minimum a door intercom unit, electronic door release, electric door strikes, key fob or card reader and related power accessories.

- Secondary entrance exit doors should be locked at all times and also provided with electronic access control systems. The secondary doors while not necessarily used for access by building occupants could be used by emergency response teams for accessing the building during emergencies.
- The existing side and rear doors have quite a bit of glazing in them. Reducing the amount of glazing in these doors would increase security at these entrances/exits. New doors are recommended so this feature could be taken into consideration when the doors are replaced.
- Within the kindergarten wing of the building there is extensive glass used to provide borrowed light and possibly visual control of the students. The amount of glazing makes it difficult for the students to find a safe area to hide during an emergency event. The amount and location of glazing should be evaluated to determine a solution that provides visual control as well as safe hiding areas within the classrooms.
- Currently there are only two security cameras being used in the building. This coverage is not adequate. A system of exterior cameras to cover the site and building entrances should be considered. The interior corridors, public areas and entrances to the toilet rooms should be considered. The storage and monitoring system for the new cameras should be sophisticated enough to store data and provide playback if necessary.



Glazing at secondary doors





Vestibule/Office disconnect

Exterior Envelope

The exterior envelope consists of aluminum windows, aluminum doors, metal panels, brick veneer, cast-in-place concrete and metal trim. Overall the exterior envelope appears to be in good condition given the age of the building and components. The exterior envelope deficiencies are outlined below:

- The aluminum window system is non insulated and original to the 1956 building. The window units are single pane glazed and thus allow heat gain and loss. The windows could be upgraded to provide insulated units with thermal breaks to fully utilize the efficiency of the mechanical systems. The current window design is continuous ribbon windows. This provides an extraneous amount of glazing in each space. The window configuration could be modified to provide two adequately sized windows in each space with the remaining wall construction being insulated solid walls. This would allow the appropriate amount of daylighting and views while insulating the walls for increased energy efficiency.
- The exterior glazed wall sections include glass block units. These units are not energy efficient. It is recommended to remove the glass block portions and provide insulated wall



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construction to improve the energy efficiency of the building. This would be done in conjunction with the recommendation of replacing the windows in the item above.

- The upper windows of the gymnasium have been painted to prevent direct glare from the sun. The paint looks unsightly from the interior and even has been rumored to be mold. The paint should be removed from the windows and a film applied to the surface of the glass. Alternatively, motorized shades could be used to provide shading at the windows as well as allowing natural light into the space when they are raised.
- The exterior doors are aluminum non insulated units. The doors are causing both heat loss and heat gain. In addition to the aluminum some of the entrance components are wood. These entrance systems could be replaced with insulated systems. Adding insulating properties to the entrances, providing upgraded hardware and safety glazing would be a value to the building.
- The existing roof is a cold applied built up system. The roof was replaced in 2010. The roof system should be early in its lifespan. The roof should be part of the yearly maintenance program and repaired as necessary.
- The roof edge flashing, coping fascia and soffits are in good condition. There are areas that are missing some panels and these should be replaced.
- Exterior caulking and sealants are brittle and cracked. New sealant and backer rods should be installed where necessary. The sealant repair should be included in the yearly building maintenance program.
- Exposed exterior concrete is in relatively good condition. There are areas of surface spalling that are most likely a result of the use of snow melting salts. These areas should be addressed before they get too bad and become a tripping hazard.
- The brick veneer is dirty and showing signs of environmental contaminants. The brick could be cleaned and the joints repointed. It is noted that the brick veneer does not contain base flashing, weeps or vents at the bottom or top of the wall. There are no signs of significant water penetration or damage to the walls.
- The exterior entrance canopy consists of steel columns and framing. The condition of the canopy is relatively good. Ongoing maintenance of the steel should be part of the yearly maintenance program. Removal of rust scale and repainting should happen on a regular basis.

Interior Finishes

The interior finishes are dated and showing significant signs of wear.

- The acoustical ceiling tiles are in need of replacement. There are stains on many of the tiles and these could be replaced. If a lighting system replacement is desired it would be recommended to replace all ceiling tiles at that time.
- Wall surfaces in the corridors are typically masonry or tile. The grout joints are dirty or marked by pencil/pens. While these materials are durable and have served the building well, these surfaces could be updated to enhance the interior experience.
- The gymnasium floor is a wood floor. The floor is in good condition at this time. No noticeable soft spots were reported.
- Painted wall surfaces are generally in good condition. Repainting should be incorporated into the yearly maintenance program.
- At various locations of painted metal, the paint is chipped and in need of repainting.

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- The flooring throughout the building is a combination of tile, terrazzo and carpet. The flooring should be replaced where damaged or a tripping hazard.
- A metal divider curtain in the corridor is in poor condition and should be replaced with a new unit that is functional.
- The interior classroom storage casework is dated and showing signs of wear. These units could be replaced with new units that also meet ADA requirements.
- Partitions between the kindergarten classrooms have quite a bit of glazing. These walls should be evaluated and possibly replaced with walls that provide better security for the occupants of these spaces.
- The toilet partitions throughout building are showing signs of wear and the paint is damaged and chipped.
- The flooring in the original toilet rooms is showing signs of wear and is damaged in some locations. The flooring should be replaced.
- At various locations in the building there were leaks or repairs needed that damaged ceilings or made necessary openings in existing surfaces. The root issue that caused this damage should be repaired and the openings patched.



Typical corridor



Classroom casework Hazardous Materials



Corridor coat storage



Ceiling damage



Classroom glazing



Painted gym windows

It is being assumed that some of the hazardous materials were abated during previous renovation projects. An AHERA evaluation and report was prepared in 2013. The report indicated some areas where remaining hazardous materials are in the building. An abatement project was completed in 2013. The AHERA report recommended continued operations and maintenance of areas tested in the report. These materials would need to be maintained according to all applicable regulations. If improvements are planned in the future, the hazardous materials will need to be removed and disposed of according to all applicable regulations. Currently a radon mitigation system is utilized in some areas of the building. This system should be monitored on a regular basis.

<u>Kitchen</u>

The food service equipment is nearing the end of its useful life. The functionality and flow of the kitchen space may also need upgrading considering how the lunches are prepared presently in schools. A detailed evaluation of the equipment, functionality and work flow of the kitchen should be performed.

Educational spaces

The existing educational spaces, type and locations are generally acceptable based on current educational guidelines. The general classrooms are large in size and meet or exceed current standards. The desired educational programming for the future should be considered. There may be goals for delivering education that the current classroom configurations do not support. More conversations can occur with the Administration to determine the educational needs. The following indicate some areas for consideration.

- Currently there are multiple large spaces that are not utilized for classrooms. These spaces have been converted to offices, storage, planning, etc. If the current enrollment numbers are to continue the size of the building should be evaluated against the number of classrooms required. Operating a larger building than necessary is not efficient and most likely results in higher operating costs than necessary.
- There may be additional programs added to the district in the near future. The classrooms available should be evaluated to confirm that the curriculum for these programs can be supported.
- The gymnasium is dedicated to physical education instruction and is also used as the assembly space. The size of the gymnasium is large and can accommodate multiple gym classes at the same time by use of a divider curtain.
- Dedicated music room is provided. The music room is located in a classroom wing that may cause sound issues during practices. The music room may be relocated to a space near the gymnasium for better sound isolation.
- A dedicated art room is provided. The space is adequate for delivering the art curriculum.
- The library is adequate and also contains adjacent resource rooms. The computer lab is not located adjacent to the library. Often times this adjacency is desired to provide flexibility between the library and computer classes.

Architectural Recommendations

We understand at this time that the ultimate outcome for Northwestern is not decided, however, ongoing maintenance and capital improvements should be considered for Northwestern as well. The District has prepared a 5 year plan of improvements for the building which should be considered closely. Prioritizing short term vs long term needs/goals should happen regularly to consider the available budget, building maintenance and needs of the District.

Currently the 5 year plan includes the following:

- Consider a PDE PlanCon reimbursement project to address all of the needs of the building
- Conduct HVAC evaluation of boiler replacement
- Provide captured building entrance
- Replace all windows in building
- Conduct boiler/heating system/air conditioning evaluation
- o Replace/repair walkway and guardrails around stadium
- Replace office carpet and tile flooring.

Exterior Improvements:



- The location of the building on the site with the stadium poses opportunities and challenges. The circulation of the site should be evaluated to determine if a better solution is available.
- The rear of the building should be redefined as the bus loading/unloading area. Revise the rear parking area to provide adequate staging for buses during the drop off and pick up times.
- The roof system should be maintained yearly. Replacement of the roofing system should be considered when the maintenance is becoming regular or too costly. A roofing evaluation could be provided to document the existing condition of the roof and describe areas that may need addressing.
- Clean and repair exterior masonry, including new sealant at all joints as necessary.
- Replace entire perimeter window system with insulated units in conjunction with insulated solid wall infills.
- Remove glass block windows and replace with either insulated windows or insulated solid wall construction.
- Replace entrance doors/storefront with insulated system with safety glazing.
- Modify existing concrete ramps as required to provide code compliant handrails.
- Provide better site signage including wayfinding as well as at the various entrance/exit doors.
- Address accessibility deficiencies at the stadium bleacher and access walkway.

Interior Improvements

- Construct new secure entrance to the building. This could be accomplished by relocating the interior vestibule partition to the other side of the office entry door. This would provide a direct connection to the office space without providing access to the rest of the building. The access control system should be upgraded to maximize the safety and security of this configuration. The existing door to the gymnasium should be modified to be an exit only door so that occupants in the gym can exit through the new vestibule but access into the gym would not be permitted.
- Upgrade toilet rooms to provide ADA compliant spaces. Improvements may require reconfiguration of partitions and possibly elimination of the undersized toilet rooms. Items include providing piping guards where they are not present, providing ADA compliant fixtures, providing ADA compliant toilet stalls and ADA compliant clearances.
- Upgrade access controls at all exterior doors/entrances.
- Where signage does not meet current codes, install new signage to meet accessibility requirements.
- Replace glazed partitions at the Kindergarten classrooms for better security.
- Repair damaged flooring throughout the building.
- Remove and replace suspended ceilings throughout the building. Typically this work is done in conjunction with a lighting replacement project.
- Update non-accessible door hardware with compliant hardware sets.
- Address accessibility compliance issues with the interior casework, classroom sinks, etc.
- o Continue with the hazardous material abatement and monitoring on a yearly basis.
- Evaluate the existing kitchen equipment and functionality of the food service area to determine what needs replaced or any reconfiguration of the spaces. A food service consultant, typically engaged by Eckles, could be used for this evaluation.

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• Replace corridor security gates with new operable units. These units may also be tied into the security system for monitoring and control.

Mechanical Systems

Boiler system

- There are two boilers in the boiler room. One of which is operable. The only functional boiler is an H.B. Smith cast iron sectional boiler installed in 1992. The boiler has a forced draft gas-oil burner, but the oil tank was removed years ago. The oil pump is mounted beside the boiler.
- The heating system uses low pressure steam to supply heat and gravity drained condensate piping back to the boiler room.
- The condensate enters a boiler feed unit receiving tank, from which it is pumped back to the boilers.

Piping and distribution

- The boiler water is treated; however that is a history of pipe leakage in the pipe tunnels that goes back beyond the 1992 boiler replacement project.
- The fact that the boiler fill/make-up water came from a well system; and the fact that we cannot account for the consistency of the water treatment-are concerns about the longevity of the piping system. Leaks repaired, as they occur, but they continue to occur.
- A great deal of the distribution piping is installed in perimeter pipe tunnels. These tunnels also contain plumbing piping, and electrical conduits. Over time, there have been a number of steam and (primarily) condensate pipe leaks, releasing hot water vapor into the tunnels. There is also a high likelihood that at least some of the piping in the tunnels has asbestos insulation on it. The most recent AHERA report indicates the quantity and locations. The repeated steam leakage is likely to have caused pipe insulation failure, corrosion of other piping, and damage to wiring inside conduits.
- Steam trap maintenance in the pipe tunnels has been inconsistent.

Terminal Equipment

- Typical classrooms have floor mounted unit ventilators with steam heating coils. The UV's are flanked by UV manufacturer provided storage shelving. These units, with very few exceptions, are original to the building.
- Toilets, corridors, and other support spaces have either steel radiation or finned tube radiation, or both.
- The Library and computer classroom have HVAC unit ventilators with built-in cooling and steam heating coils. These units are significantly newer than the typical classroom units.
- A number of small office spaces are served by thru-the-wall HVAC units with built-in cooling and steam heating coils. These units appear to have been installed at the same time as the HVAC UV's.
- The gymnasium was intended to be served by two steam heat air handling units, which have been abandoned.
- Locker rooms are served by steam cabinet and unit heaters; and with small air handling units intended to function as make-up air units.
- The cafeteria is served by three floor mounted UV's similar to the classroom units.

Control system

• The controls are primarily pneumatic by Robertshaw or a successor company.

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• There is a small DDC control panel in the boiler room that operates five zone control valves in the steam mains feeding parts of the building

Miscellaneous

- At some point in time several gravity roof vents, originally intended to relieve excess air supplied by the UV's, to the outside, by natural pressure build-up inside the building. In at least two locations, the gravity vents were replaced by fans. This was probably done to remove excess heat; but, in reality, probably upset building pressurization.
- Most of the operable boiler room equipment is on emergency power.

Summary and Commentary

- The heating piping is currently in need of replacement.
- The building is depending on one boiler for heat.
- The south facing classrooms would receive a significant amount of solar heat gain, given the amount of glass and glass block in the exterior wall.
- In general, steam heating systems are difficult to control; and become very inefficient when not
 properly maintained.
- It is very likely that the classrooms are not getting sufficient outside air ventilation-as required by current codes.
- Terminal equipment 50 or more years old has long ago passed its useful lifespan.
- Although the kitchen is functional at this time, there appear to be a significant number of old appliances. If there is an evaluation of the kitchen that results in significant upgrades, the exhaust and make-up air situation will have to be reviewed. It is likely that additional ventilation will be required. Some Districts request air conditioning in kitchens. While this can be effective at times; when large exhaust hoods are operated, most of the cool air is exhausted before it can have a significant impact on space conditions. There are options here that should be explored further, if cooling is required.

Recommendations

The complete HVAC system in this building should be replaced. Currently, most schools are fully air conditioned; but the extent of that conditioning should be discussed with the Board and Administration for cost reasons. A fully conditioned building would include the following:

- Two or more new high efficiency boilers with modulation for improved part load performance.
- A central air cooled chiller to provide mechanical cooling to the classrooms and library.
- If the gym is to be air conditioned, consider a separate system for this space to best allow for intermittent and off hours use. New roof mounted equipment and new ductwork would be installed.
- Eliminate and abandon the existing steam piping in the pipe tunnels
- Install new hot water and chilled water piping above corridor ceilings to feed new terminal equipment with a 4-pipe configuration, Discuss the pros and cons of adding glycol based antifreeze to the piping systems.
- Provide a separate HVAC system for the office area to permit year-round use without treating the entire building.
- Replace all exhaust fans
- Provide new vertical ducted unit ventilators for each classroom. These unit would he sized to allow for thermal improvements in the building shell, and for current, code mandated, outside air ventilation.

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Provide a new DDC control system throughout.

We estimate that the above to be between \$2,500,000 and \$3,500,000. If the building could be completely empty of students for a school year; and bids were received in late spring, with completion in the early fall of the next year; it may be possible to secure lower bids.

Plumbing Systems

Domestic water supply system

- There are three wells that supply water to the building. They are not the original well shown on the drawings. There are a number of wells on site, some of which are inactive.
- In addition to the NPC (Northwestern Primary Center), the supply system serves the remote Annex Building and the football concession stand. Both of these water supply lines are relatively long and contain water that can stagnate over long periods of idle time.
- The wells supply water to two large plastic holding tanks in the boiler room. There is an inactive prefilter unit on the west side of the boiler room. We believe it was taken out of service.
- From the tanks, the water is pumped through filtration equipment, then through a water meter, and distributed throughout the building.
- The water supply system is maintained and overseen by an outside consultant, GLA water consultants. The water supply appears adequate in both quantity and quality for its current usage.
- There is a separate well system, beyond the east end of the football field, that is connected to two large above ground steel storage tanks. It is our understanding that this well/tank system is used to water the ball fields and turf in the football stadium. There is no human consumption of this water. This system is drained in the winter time. It is also our understanding that the steel tanks are rusting on the inside and imparting, at times, a rust color to the water.

Domestic hot water

- There is a large hot water storage tank on the south end of the boiler room, near the stair. The tank has a heat exchanger in it which, at one time, used boiler steam to heat the water, when steam was available.
- Now the heat is exclusively provided by a small, dedicated, natural gas fired heater.
- There are other hot water heaters to handle other loads locally (such as the kitchen and locker areas) but we did not observe them.

Sewage system

- The sanitary sewage from the building exits the building on the south side and flows through underground sewers and several manholes to a septic tank, built into the hillside north of the west end zone of the football field and west of the bleachers. From this septic tank, effluent passes into two distribution boxes, and eventually enters one of two absorption fields. One of these fields appears to be under the west end zone.
- This system is to be addressed in a separate study, undertaken by HRG Engineering.

Natural Gas supply

• Gas is supplied from a gas meter house at the northwest corner of the site near route 168. Low pressure gas is supplied to both the Annex and NPC from this source. It is our understanding that the gas supply pressure is stable.



Piping and distribution

- A great deal of the distribution piping is installed in perimeter pipe tunnels. These tunnels also contain steam and condensate piping, and electrical conduits. Over time, there have been a number of steam and (primarily) condensate pipe leaks, releasing hot water vapor into the tunnels. There is also a high likelihood that at least some of the piping in the tunnels has asbestos insulation on it. See the 2013 AHERA report for quantities and locations of hazardous materials. The repeated steam leakage is likely to have caused pipe insulation failure, and ultimately deterioration of the domestic water piping from the outside.
- Some sanitary piping is also installed in the pipe tunnels, and is likely to have been similarly impacted.
- The domestic water piping we could observe was copper. The insulation that we could observe was in fair to poor condition.
- Observable storm and sanitary piping was a mixture of cast iron (with patched sections of PVC).
- The roof drains were replaced as part of the 2010 capital improvements project. We do not know how much of the adjoining rain conductor was replaced at that time.

Fixtures

- Most of the china fixtures appeared to be original. Some had updated trim (faucets, flush valves, etc.) We observed no infrared activated faucets or flush valves
- Due to the age of the fixtures, they could not be considered "low flow" by today's standards. This means that the waste water flow to the septic system is higher than it would be if the fixtures were current.
- Very few, if any, fixture installations permitted handicapped access.
- Lavatories were exposed bracket mounted to the walls
- Urinals were stall type which were recessed into the floors.
- Water closets were carrier/wall mounted.
- In girl's toilets there were floor drains.
- In boy's gang toilets, where urinals were installed, there were no floor drains.
- Showers were completely manual, and were recess mounted behind the chase wall. Two hand valves were wall mounted below the head. There was a recessed soap dish in the wall under the shower head and above the valves. There were no temperature or pressure activated safety controls. The shower drains were located in a perimeter gutter around the outside of the shower room. We could not determine if the floor sloped to this gutter.
- The stainless steel fixtures in the kitchen area appeared to be original; however a new dishwasher had been recently installed.
- There are a number of special drinking water dispensers installed in the building which contain reverse osmosis filter systems. According to GLA Water Consultants, these units were added due to complaints about certain "tastes" in the water dispensed from the previous drinking fountains. Cups are required to use this water.

• Most of the floor drains we observed were visibly corroded.

Miscellaneous

- The building is not sprinkled due to the limitations imposed by the well system.
- There is a field built grease trap outside the kitchen.

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- There is an electric Kiln installed in the maintenance tractor storage garage. Operation of the electrical contacts in an area where there could be gasoline fumes is of some concern.
- The kitchen is a full cooking kitchen. If there are renovations here, they typically involve significant modifications to the pumping systems.

Summary and Commentary

- The plumbing piping that currently exists in the pipe tunnel cannot, our opinion, be counted on for 20 to 30 more years of service, due to the repeated leakage from the steam piping system over the years.
- A similar statement could be made about the cast-iron waste piping in the tunnels.
- The fixtures installed do not comply with current "low Flow" requirements.
- It does not appear that any gang toilet rooms could be characterized as "accessible" to the handicapped.
- The current "RO drinking water dispensers" produce ultra-pure water, which is reputed to be tasteless. This is not inconsistent with other installations where ultra-pure water is consumed. It tends to have no taste, and some individuals find that objectionable.
- The existing water supply prefilter is out of service.
- The existing hot water storage tank was sized for High School use; the steam heating coil is no longer used; and a relatively inefficient (by today's standards) gas fired heater is used to create domestic hot water.
- According to GLA, the water quantity and quality produced by the three operable wells, meets current DEP standards for facilities with fewer than 500 occupants.
- The boys' gang toilets do not have floor drains because the stall type urinals serve that purpose The existing fixtures are not low flow fixtures. If the urinals are replaced with conventional wall mounted units, consideration should be given to adding floor drains in the toilets.

Recommendations

We anticipate significant changes in the various gang toilet layouts. We know that piping in the pipe tunnels is in questionable condition. Virtually the entire plumbing system is over 50 years old. To make this facility able to function for the next 20 to 30 years, we recommend a complete system upgrade with new piping, fixtures, safety controls; as well as operational domestic water filters. We also recommend that all existing sanitary sewers that might be reused be "videoed" prior to the completion of the design drawings. That would enable the designer to address these issues as part of the project. We also recommend a new domestic hot water heater and storage tank, sized for the load imposed upon it. We estimate the cost of this upgrade to be \$800,000 to \$1,000,000.

Electrical Service and Central Facilities:

- The transformer portion of the original main power center was removed from the transformer vault room along with the utility's company's high voltage cables in a recent project.
- A new 300 KVA pad mounted transformer was set outside the boiler room and a new 1600 amp, 3 phase, 120/208 volt main switch was set in the original electrical room.
- The original Westinghouse distribution portion of the power center was retained and refed from the new main electrical switch.



- This facility also serves the adjacent stadium with a 3P/300 amp feed for the field lights and visitor's concession stand and a 3P/150 amp feed for the home side concession stand.
- The existing main distribution gear is original and has surpassed its life expectancy. Andy planed renovation or addition to this facility will require an electrical service upgrade.

Wiring and Distribution:

- The building has undergone several renovations and additions in the past. Some of the latest upgrades have installed newer Square 'D' electrical panels that are in the early stages of their useful life. But many of the original electrical panels still serve the buildings boiler room equipment, lighting, and classrooms receptacles.
- Original electrical panels are typically in poor condition. Cabinet hardware is broken or missing, spare capacity has been depleted, replacement breakers can no longer be obtained, and some panels have missing breakers leaving interior buss and wiring exposed.
- Most wiring devices are original equipment and in poor condition. Classrooms have minimal number of receptacles and the district has added electrical panels and surface raceway in an attempt to accommodate the power requirements of electronic equipment used in today's classrooms. Art rooms and lab areas do not have code required Ground Fault Receptacles in the areas of sinks.
- Some conduit above the corridor ceilings has been supported using ceiling wire and noncode compliant Romex wire has been observed in some areas.
- Any planed renovation or addition to this facility will require a substantial upgrade to the existing electrical distribution system.

Lighting:

- For the most part the classrooms, corridors, and main areas of the building have been upgraded to the more efficient T8 fluorescent lamps, but most mechanical and storage spaces still use older style T12 lamps.
- In general lighting fixtures are 2' X 4' recessed lensed troffers.
- The gymnasium lighting fixtures are lamped with 400 watt metal halide lamps. These lights are left on most of the day due to the time it takes to restrike and bring fixtures back up to full light output.
- This facility does not have automatic lighting control as mandated by current energy codes.
- Any planed renovation or addition to this facility should consider a lighting upgrade to take advantage of the energy savings available with newer fluorescent and LED lighting fixtures, ballast, and automated lighting control technology.

Emergency Power:

- A newer pad mounted natural gas fired generator has been installed outside the boiler room on a recent project. The remote annunciator panel is located in the office area.
- The generator server two transfer switches. One transfer switch powers all the boiler related mechanic equipment, kitchen cooler and freezer, and some small air-conditioning units allowing operation during a power outage. The second switch serves minimal emergency lighting in a portion of the building.
- The generator does not serve all the emergency lighting in the facility. Battery powered exit signs and lighting units cover corridors and toilet rooms.

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• The facility does not appear to have emergency lighting at the exterior of all egress doors as required by current code.

Communications Systems

- Pa:
 - This facility has a newer Bogan paging system rack located in the office. The system utilizes existing surface mounted wall speakers and recessed call-in buttons. Due to the placement and age of the existing wall speakers intelligibility is reported poor in some areas.
- Clock:
 - The district reports that the master clock system is not functional. Stand-alone battery powered clocks have been installed in classrooms, educational spaces, and staff areas.
- Telephone:
 - The teaching staff does not have access to classroom telephones. Telephones are only installed in the office, guidance, nurse, and faculty rooms.
- Special Purpose sound Reinforcement Systems:
 - > The gymnasium has a local sound system. This system is reported to be operational.
 - Classrooms do not have local sound reinforcement systems.
- Data and Technology:
 - This building does not have fiber optic cable connecting it to the other buildings in the district. Internet access is over copper. The building has minimal data in the typical classroom. Computer rooms have been created with wired connections.
 - The building does have wireless coverage and uses wireless access points located on the ceiling of the corridors.
 - Each classroom has a ceiling mounted projector and interactive marker board. Input jacks at the teacher's desk allow the educator to send content from the teacher's computer to the projector. No classroom sound system was observed. The small speaker in the projector or portable powered speakers form the teacher's computer must be utilized for sound.



• TV.

- This facility does not have a television distribution system. Televisions on carts are used to view recorded programming.
- Fire Alarm:
 - This building is covered with a newer simplex fire alarm system. The main fire alarm panel is a Simplex 4010 and is located in a closet across from the office.
 - The educational spaces and toilet rooms are covered by code compliant fire alarm strobe lights. Smoke and heat detectors are utilized in storage and mechanical spaces.
 - The corridor horn/strobe units and fire alarm pull stations have been installed at the proper height and locations to comply with current code.

Security:

- This facility has minimal security. Analog cameras are located at the main and secondary entrance. The two cameras are viewed on a monitor in the office and recorded on tape.
- > The building uses motion sensors in the hallways for intrusion detection.
- The building has card access on selected exterior doors allowing district staff keyless access to the building.
- A security upgrade should be considered if this facility will continue to be utilized by the district.

<u>General:</u>

- This facility has been well maintained, but most of the electrical infrastructure has been kept in use beyond its useful life expectancy.
- This facility has minimal security, communication, and technology system found in modern schools today. Future use of this facility will require upgrades in these areas.
- The districts athletic stadium is served through this facility. Any plans regarding this building will need to consider the impact on the stadium as well.
- We estimate the cost of the electrical system upgrade to be \$1,950,000 to \$2,500,000.



PATTERSON PRIMARY SCHOOL

701 Darlington Road Beaver Falls, PA 15010 Phone: 724-843-1268 Fax: 724-846-8082 Principal: Mrs. JaneAnn Fucci

Front Façade Image



Aerial Photo



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Lower Floor Plan



First Floor Plan





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Timeline Original Building: 1969 Renovations and Capital Improvements: 1979 Addition 1991 Boiler, 2009 Condensing unit, 2010 UV replacement, 2012 ADA and entrances, 2013 Food service equipment

Current Enrollment : Grades K,1-2, 224 Students

Building Square footage: 28,230 sf

Condition Commentary

Overview

Patterson Primary School was originally constructed in 1961. A classroom addition was added in 1979. No major renovations or improvements were performed at the building over the years. Continued maintenance and mechanical unit replacements have occurred. The building is small and contains just enough classrooms to serve its grade levels. If changes to the grade groups within the building are planned then the space and classrooms available should be evaluated.

Site Accessibility

The site is currently a split configuration with access to the upper level and lower level being separate from each other. The parking areas do not connect with one another due to the existing side grading. There are accessible entrances at both levels of the building. The items listed below highlight observations and deficiencies that should be considered when doing a renovation project or included in capital improvements.

- The lower level parking area provides an accessible entrance to the lower level of the building. There are accessible parking spaces provided. The accessible route to the door appears to be code compliant, however, an accessible route line painting should be provided to delineate the accessible route from the parking spaces to the main entry. The entrance door is not code compliant and should be addressed.
- The main building entrance is accessible with the use of a depressed curb ramp. An accessible route line painting should be provided to delineate the accessible route from the parking spaces to the main entry.
- Accessible parking spaces are located in close proximity to the main entrance to the building. The number of accessible parking spaces may be too few given the number of students and staff in the building. The current zoning requirements can be reviewed to confirm the required number of accessible spaces.
- The sidewalk components around the building appear to be code compliant.
- The access to the hard surface play areas are not ADA compliant due to the use of stairs. The stair handrails are not up to current code and should be replaced.
- The parking areas of the site are very limited and will not accommodate both occupants and visitors easily. The upper level, front parking area could be made larger to provide two parking aisles. The site setbacks will need reviewed before this solution is deemed viable.

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Rear entry



Main parking area



Stairs to hard surface play



Main entrance

Building Accessibility

- Accessible circulation inside the building is quite good throughout the corridors and classrooms while on each level. Two stair towers provide access to each level.
- The building does not contain an elevator which complicates the building accessibility. An elevator and related equipment room should be considered for the building. One potential location for the elevator would be next to the classroom entrance towards the rear of the building. This area would connect both floors and limit the amount of interior construction work.
- Where available the classroom sinks are not accessible and are located in casework that does not provide a knee space for wheelchair front approach access. In many locations the sink and casework are configured in such a way that a side approach/reach will not even work.
- The classroom built in casework is not accessible due to the size, configuration and reach ranges. While some efforts have been made to locate soap dispensers and paper towel dispensers at lower levels, a more comprehensive approach could be combined with providing new casework and accessible sinks.
- The lower level faculty room casework and sink is accessible.
- The main public toilet rooms are not accessible. The toilet stalls are not large enough to meet code and they also have handrails provided that do not meet the current code. It appears that the toilet rooms are large enough to be made compliant. New partitions and fixtures can be utilized to bring the spaces in compliance with the code.
- Accessible single user toilet rooms are available on each level.
- The classroom bookbag storage system is not ADA compliant in several classrooms.
- One water cooler in the corridor is accessible and one is not. The non compliant unit should be replaced with an ADA compliant model.
- Door hardware throughout the building consists of non-accessible types. The non-accessible hardware should be replaced with code compliant units.

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Rear parking area

- The approach to classroom doors does not provide the required clearance at the latch side of the door. This modification would require significant construction to update and may be "grandfathered" by existing conditions. The required clearance could be provided if the built-in storage closet was eliminated and the walls reconfigured. If a significant renovation project is desired, then these modifications should be considered.
- Accessible signage is not provided at classroom entrances and exits. Code compliant signage should be provided.



Compliant faculty room



Non accessible casework



Non-compliant water cooler



Non accessible bag storage



Non-compliant toilet stall



Non-compliant doors

Means of Egress

The means of egress from the building is generally adequate based on separation distance and quantity. There are egress deficiencies throughout the building that should be noted.

- Secondary exit doors generally have the required panic hardware. However the panic hardware is quite old and is in need of adjustment. If the doors are to be replaced with new units, the hardware should be replaced as well. Exit pathways should be kept clear.
- The main entrance doors have recently been upgraded and are in good condition with the required panic hardware.
- There is one means of egress from the upper floor that exits to grade. The other exit from this level is by way of a stair that continues to the lower floor and exits to the exterior.
- Tactile exit signage is not provided at the exterior egress doors and would be required to meet current codes.
- Two of the lower level classrooms have doors that exit directly to the exterior. These exits are not required and may be eliminated to increase security at this level.
- The stairs handrails do not meet current codes.
- There is currently storage under the stairs. Storing items in an egress stair is not code compliant. All materials should be removed from below the stairs unless a fire rated enclosure is provided.





Main egress doors



Direct exit from classroom



Egress doors blocked



Storage under egress stairs

Safety and Security

Safety and security for the building is relatively good. Observations and recommendations are listed below.

- The main entrance vestibule is configured in such a way that a safe entrance is provided. Visitors must pass through the office to gain access to the rest of the building.
- Lower level entrances/exits should be controlled by an access control system to improve the security on the lower level. These openings should also be monitored by a surveillance system with monitors located in the main office.
- There is currently a very limited access control system used in the building. The existing system should be evaluated to determine what upgrades are required to provide improved access control and safety. Upgraded access control systems should be provided at the lower level entrance doors. The system should include at a minimum a door intercom unit, electronic door release, electric door strikes, key fob or card reader and related power accessories.
- Secondary entrance/exit doors should be locked at all times and also provided with electronic access control systems. The secondary doors while not necessarily used for access by building occupants could be used by emergency response teams for accessing the building during emergencies.





Main vestibule doors

Exterior Envelope

The exterior envelope consists of aluminum windows, aluminum doors, metal panels, brick veneer, cast-in-place concrete and metal trim. Overall the exterior envelope appears to be in good condition given the age of the building and components. The exterior envelope observations and deficiencies are outlined below:

- The aluminum window system is non insulated and original to the 1961 building. The window units are single pane glazed and thus allow heat gain and loss. The windows could be upgraded to provide insulated units with thermal breaks to fully utilize the efficiency of the mechanical systems.
- The main entrance exterior doors are aluminum insulated units. These doors have been recently replaced and are in good condition.
- The existing roof is a built up system and was replaced in 1994. The roof may be nearing the end of its serviceable life. A replacement project of 14,400 sf is planned for 2015 according to the capital improvements listing. An evaluation should be made to confirm if additional roofing area needs replaced as well.
- The roof edge flashing, coping fascia and soffits are in good condition. There are areas that are missing some panels and these should be replaced. If a roofing project is taken on, the fascia and trim should be replaced at the same time.
- Exterior caulking and sealants are brittle and cracked. New sealant and backer rods should be installed where necessary. The sealant repair should be included in the yearly building maintenance program.
- Exposed exterior concrete is in relatively good condition. There are areas of surface spalling that are most likely a result of the use of snow melting salts. These areas should be addressed before they get too bad and become a tripping hazard.
- The brick veneer is dirty and showing signs of environmental contaminants. The brick could be cleaned and the joints repointed.
- The shingles on the storage building is in need of replacement.





Shingles need replaced



Masonry wall

Interior Finishes

The interior finishes are in relatively good condition.

- The interior wall surfaces have recently been painted and are in good condition at this time.
- If a lighting system replacement is desired it would be recommended to replace all ceiling tiles at that time.
- Wall surfaces in the corridors are typically tile and are in good condition. The joints should be cleaned as needed to remove pencil and pen markings.
- The multi-purpose room floor is tile. The floor is in good condition at this time. Damaged or loose tiles should be replaced when noticed.
- At various locations of painted metal, the paint is chipped and in need of repainting.
- The flooring throughout the building is a combination of tile, terrazzo and carpet. The flooring should be replaced where damaged or a tripping hazard is present.
- The interior classroom storage casework is dated and showing signs of wear. These units could be replaced with new units that also meet ADA requirements.
- The toilet partitions throughout building are showing signs of wear and the paint is damaged and chipped. These partitions should be replaced as part of the toilet room ADA upgrades.



Typical corridor



Classroom casework



Multi-purpose room

<u>Hazardous Materials</u>

It is being assumed that some of the hazardous materials were abated during previous renovation projects. An AHERA evaluation and report was prepared in 2013. The report indicated some areas where remaining hazardous materials are in the building. These materials consist of piping insulation and vinyl asbestos tile. The AHERA report recommended continued operations and maintenance of areas tested in the report. These materials would need to be maintained according to all applicable regulations. If improvements are planned in the future, the hazardous materials will need to be removed and disposed of according to all applicable regulations. Another AHERA evaluation will be required in 2016.



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<u>Kitchen</u>

The food service equipment has recently been replaced and should be satisfactory for years to come.

Educational spaces

The existing educational spaces, type and locations are generally acceptable based on current educational guidelines. The general classrooms are large in size and meet or exceed current standards. The desired educational programming for the future should be considered. There may be goals for delivering education that the current classroom configurations do not support. More conversations can occur with the Administration to determine the educational needs. The following indicate some areas for consideration.

- The general classrooms are adequate for the current enrollment. If different grade levels are planned for the building the current classrooms should be evaluated to determine if they are adequate for the new enrollment. For instance, if the grade grouping is adjusted to handle the district's PK and K grade groupings, this will result in nearly 25 students in each kindergarten classrooms, which may not be desirable.
- There may be additional programs added to the district in the near future. The classrooms available should be evaluated to confirm that the curriculum for these programs can be supported.
- The multi-purpose room is a location for the cafeteria, gymnasium, and auditorium. The space is small but appears to be accommodating the needs of the school at this time. The walls could benefit from having acoustical treatments added to them. This would enhance the sound performance of the space.
- Dedicated music room is provided. The music room is located in a classroom wing that may cause sound issues during practices. If sound transmittance is an issue, acoustical treatments could be considered.
- A dedicated art room is provided. The space is adequate for delivering the art curriculum.
- The library is adequate and is also located adjacent to the computer lab. This adjacency is good and allows for support between the two spaces if desired by the programming.

Architectural Recommendations

We understand at this time that the primary focus may be on other District buildings, however ongoing maintenance and capital improvements should be considered for Patterson. While a major renovation may not be feasible at this time, ongoing improvements may be more appropriate based on the current budget. The District has prepared a 5 year plan of improvements for the building which should be considered closely. Prioritizing short term vs long term needs/goals should happen regularly to consider the available budget, building maintenance and needs of the District.

Currently the 5 year plan includes the following:

- o Provide additional storage rooms
- o Provide student lockers
- Install acoustical panels in multi-purpose room
- Create teacher's lounge separate from work area
- o Replace window blinds
- Increase size of front parking lot

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• Provide gate between basketball and tennis courts.

Exterior Improvements:

- Site signage could be considered to improve wayfinding for visitors to the building.
- The accessible routes to the building on the lower and upper level should be delineated with line striping.
- The roof system should be replaced to provide longevity of the system. Replacement of the roofing system would also include replacement of the perimeter metal flashing and trim..
- Clean and repair exterior masonry, including new sealant at all joints as necessary.
- Replace entire perimeter window system with insulated units.
- Replace shingles on attached storage building. Metal roofing system may be considered.

Interior Improvements

- Upgrade student gang toilet rooms to provide ADA compliant spaces. Improvements may require reconfiguration of partitions. Items include providing piping guards where they are not present, providing ADA compliant fixtures, providing ADA compliant toilet stalls and ADA compliant clearances.
- Upgrade access controls at all exterior doors/entrances.
- Where signage does not meet current codes, install new signage to meet accessibility requirements.
- Repair damaged flooring throughout the building.
- Remove and replace suspended ceilings throughout the building. Typically this work is done in conjunction with a lighting replacement project.
- Update non-accessible door hardware with compliant hardware sets.
- Address accessibility compliance issues with the interior casework, classroom sinks, etc.
- Continue with the hazardous material abatement and monitoring on a yearly basis.
- Provide acoustical wall treatments in the multi-purpose room.

Mechanical Systems

Patterson elementary school was built in 1969. The classrooms are heated and cooled by selfcontained unit ventilators with hot water heat. Small split system air conditioners cool office spaces and a split system air handling unit serves the cafeteria/multipurpose room.

UNIT VENTILATORS

Self-contained direct expansion cooling unit ventilators with hot water heating coils condition the exterior zones of the school. Some condensing unit parts on the unit are not accessible from inside and must be accessed via man lifts from outside. The units in the 4 classroom addition are of a different vintage—the local representative indicates parts are no longer available. Two of the units have been replaced in recent years; one of those was an "addition" unit.

SPLIT SYSTEMS

The faculty room and administrative office each have small split system air conditioners. These systems were installed in 2012. The gym/cafeteria area is conditioned by a large air handling unit with a direct expansion split system cooling coil and hot water heat. The air handling unit is original to the building and has no reported problems. The condensing unit serving the AHU is relatively new.

SELF CONTAINED AIR CONDITIONING UNITS

A reading room off of the library is cooled by a recently installed self-contained room air conditioner. Two other small support rooms are cooled by window air conditioners.

EXHAUST SYSTEM

The restrooms and janitor closets are exhausted to the roof. The kitchen dishwasher is directly vented to the roof. The faculty room is also exhausted. The kitchen exhaust hood is exhausted through a roof mounted exhaust fan.

BOILERS

Two boilers provide heating hot water to the elementary school. The first, Bryan, Model CL-120-ST, has a 960,000 BTU output listed and is original to the building. The second is estimated to have been installed in the 1980's and is a Weil-McLain, Model No. 588, with a listed output of 1,084,000 BTUs. The water is distributed by two 3HP pumps through the building. There is no three-way control valve in the piping, so the ability to reset supply heating water is very limited.

CONTROLS

The control in the building is generally pneumatic. A simple DDC scheduling system is installed, but is antiquated. A single air compressor serves the building.

VENTILATION

Current control of outside air to the space is regulated by each unit ventilator. The original building units were designed for 313 CFM of OA per unit. The 4 addition UV's were scheduled for 400 CFM of OA.

Discussion

The overall condition of the mechanical system in this building is fair. The supporting hot water piping system should last another 15 to 20 years. The original boiler serving the building should be expected to be replaced in approximately 5 to 10 years. We believe that replacement parts are still available for both the Bryan and Weil McLain boilers. The Bryan boiler is natural draft. The Weil McLain boiler is forced draft. Connecting them to the same breeching can be troublesome. The weak link in the system is the unit ventilators. They tend to be noisy due to the built-in compressors. It appears that units have been replaced on an as-needed basis.

Recommendations

- Ideally, it would be wise to plan for a system replacement that would include 2 new, high efficiency boilers, and air cooled packaged chiller, conventional 4-pipe hot water/chilled water UV's, and a new DDC control system.
- Realistically, with continued maintenance and as-needed component replacement, the system can continue to function as it is.
- High on the priority list should be the replacement of the three remaining UV's in the addition.
- The next priority should be the replacement of the pneumatic control system with a current DDC system.
- The building exhaust airflows should be checked and exhaust fans replaced on an as needed basis.



Plumbing Survey Summery

System Description

Patterson elementary school was built in 1969. The water and sewer service to the building are connected to city services. There is a single gas service to the site and is the only source of fuel. The fixtures have been replaced on an as needed basis throughout the building but most are original to the building.

SERVICES

The gas service is located at the back comer of the Jot. There is a 4" main entering the building.

The water service entry is located in a corner of the mechanical room. There is a 3" water service (according to the original drawings) with a pressure reducer. There is no backflow prevention on the entry. The gage at the entry read 70 psi.

FIXTURES

The majority of the fixtures are original to the building. There are floor mounted water closets and wall mounted lavatories and urinals. Due to the age of the building the fixtures do not meet current low flow requirements. The original three kindergarten rooms have restrooms within the classroom with residential type toilets installed. At least one of these toilets is used as a storage room. The nurse's station also has a residential type toilet. Janitor sinks are the elevated/utility tub design, not the floor/mop sink type. There are sink units in practically every classroom. In 2012, accessible, unisex toilets were installed on both floors.

SANITARY WASTE

The sanitary waste to the building is drained to the city supported sewer system. There were no reported problems with drainage. The kitchen does have grease trap in a pit in the exit path from the space. There was a garbage disposal on the dishwasher line up, as is typical to the district.

STORM WATER

The roof is drained via typical flat roof type roof drains. There are no reported problems with the system.

DOMESTIC HOT WATER SYSTEM

Domestic hot water for the building is provided by a replacement Raypak 640 MBH input gas fired heater. An approximately 400 gallon storage tank supports the system.

Discussion

The overall condition of the plumbing system in this building is good. The supporting piping system should last another 15 to 20 years. The existing plumbing fixtures are original to the building in most cases. They do not meet current low flow regulations.

Recommendations

- Continue current maintenance practices
- As fixtures fail, replace them with current low flow type and coordinated faucets and flush valves.


Electrical Items

Electrical Service and Central Facilities:

- The electrical service is fed overhead from pole mounted transformers owned by Duquesne Light. The main electrical gear is manufactured by Square D. The 1000 amp 120/208 volt service is original and spare parts are not readily available. The gear is operational but is past its useful life expectancy.
- Transfer switches have been added in the electrical room and the code required working clearance around the electrical panels has been compromised.

Wiring and Distribution:

- Branch circuit panels are original Square D equipment and appear to be at capacity with no room for expansion.
- Newer panels have been added to serve computer rooms.
- Typical classrooms have few receptacles and surface raceway has been utilized to add receptacles in areas where electronic equipment has been added.
- Receptacles located on the exterior of the building, toilet rooms, and in close proximity to sinks do not have Ground Fault Interruption protection as require by current code.

Lighting:

- The lighting in the facility has been upgraded to energy efficient T8 Fluorescent lamps.
- Current code required automatic lighting control has only been installed in the newer office area and nurse suite and is not present in other areas of the building.
- Lighting fixtures in the classrooms are surface mounted units with a wraparound lens. The fixtures operate four fluorescent lamps and produce a lighting level in excess of today's lighting recommendations resulting in an excessive use of energy.
- Recessed 2' X 4' lensed units are providing lighting in the corridors. The four lamp units produce lighting levels above todays recommended lighting levels.
- The gymnasium has older style Metal Halide lamps.

Emergency Power:

- A newer natural gas fueled, pad mounted generator has been installed outside the boiler room. The 50 KW unit serves the heating equipment, kitchen coolers and freezer, and emergency lighting through two new transfer switches located in the electrical room.
- The building appears to have an emergency only lighting system with lighting fixtures that are used only when the generator runs. This type of system requires a phase monitoring panel that monitors the electrical feed to lighting panels in the facility. No phase monitoring panel was observed.

Communications Systems

- Pa:
 - > The facility has a Bogan paging system located on the counter in the office.
 - > Typical classrooms have recessed wall mounted paging speakers and call-in buttons.
- Clock:

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- The original clock system has been replaced with a newer wireless clock system as manufactured by Primex.
- Data and Technology:
 - This building does have fiber optic cable connecting it to the other buildings in the district.
 - > Computer rooms have been created with wired connections.
 - The building does have wireless coverage and uses wireless access points located on the ceiling of the corridors.
 - Each classroom has a ceiling mounted projector and interactive marker board. Input jacks at the teacher's desk allow the educator to send content from the teacher's computer to the projector. No classroom sound system was observed. The small speaker in the projector or portable powered speakers from the teacher's computer must be utilized for sound.
- Fire Alarm:
 - The fire alarm system has been replaced with a newer Simplex 4010 fire alarm panel. The facility has audio and visual devices as per the current code, and device location and mounting height are correct.

Security:

- > The building has minimal security. The main entrance has a camera that is viewed in the main office.
- The district has card access system manufactured by Securitron. Proximity card readers are used on two exterior doors to allow staff keyless entry into the building.

General:

- The original electrical gear and distribution panels are past their useful life and should be replaced. The system has little to no capacity for expansion.
- Additional energy savings will be realized by upgrading incorporating automatic lighting control to comply with current energy codes.
- Ground Fault receptacles should be installed in areas required by current code.
- The existing generator should be equipped with a larger fuel tank to facilitate longer run times during extended power outages. The unit's capacity should be evaluated to determine if the heating system could be added to the generator.
- This facility has minimal security, communication, and technology systems found in modern schools today. Increasing the camera surveillance of the school and surrounding area should be considered to address the level of security required in schools today.



BLACKHAWK INTERMEDIATE SCHOOL

635 Shenango Road Beaver Falls, PA 15010 Phone: 724-843-5050 Fax: 724-843-9175 Principal: Mrs. Danielle Bailey

Front Façade Image



Aerial Photo





BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 - BLACKHAWK INTERMEDIATE SCHOOL Page 1 of16

Basement Floor Plan



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First Floor Plan





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Second Floor Plan





BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 - BLACKHAWK INTERMEDIATE SCHOOL Page 4 of16

Timeline Original Building: 1939 Renovations and Capital Improvements: 1959 Renovations 1992 Renovations, abatement 2008 Playground 2009 door replacement (3 doors) 2010 Masonry restoration, main entrance doors 2011, linestriping, ADA improvements, landscaping, chiller 2012 ADA improvements in main lobby, boiler 2013 Roofing replacement, metal fascia, food service, 2014 Battery backup system for elevator

Current Enrollment : Grades 3-5, 537 Students

Building Square footage: 94,300 sf

Condition Commentary

<u>Overview</u>

The School was originally constructed in 1939 as the Chippewa Elementary School. Additions/renovations were performed in 1959 and 1992. The 1992 project upgraded the building to its current configuration. Continued maintenance and mechanical unit replacements have occurred. The building layout is complex and is on multiple levels. The circulation patterns of the building are not easily navigated and are confusing to visitors and new students in the building. The circulation components added in 1992 attempted to connect the levels and various classroom groups but do so in a long and complicated path.

Site Accessibility

The site is relatively flat and has good circulation and accessibility.

- The circulation on the site splits the vehicular traffic from the bus traffic providing safe conditions for students and parents during morning drop off and afternoon pickup. Traffic is directed by signage as well as movable chain and bollards.
- The main building entrance is accessible with the use of a depressed curb ramp. The accessible route line painting is provided to delineate the accessible route from the parking spaces to the main entry.
- Accessible parking spaces are located in close proximity to the main entrance to the building.
- Accessible and pedestrian walkways are indicated with line painting providing safe circulation paths to the sidewalks and into the building
- The sidewalk components around the building appear to be code compliant. The use of curb ramps and tactile warning strips at the bottom of the ramps meet the current code.
- The rear access to the building used by students being dropped off and picked up by busses is code compliant with the use of curb ramps and tactile warning strips at these ramps.







Rear bus drop area

Main Entrance

Building Accessibility

- Accessible circulation inside the building is generally good. There are multiple stairs and ramps throughout the building that connect the various levels.
- The building has an elevator that connects the multiple levels. The elevator is a two sided unit which functions well.
- The stair wells may contain portions of the handrails that are not code compliant. Some handrails are configured in a "ladder" design that could allow someone to climb up and over the rail. Other rails have openings that are wider than 4". Some rails are not at the required height.
- An each level the main public toilet rooms are accessible. There may be the need to add the a vertical grab bar on the side wall to meet the current code. Accessible pedestal wash stations have been added.
- Accessible single user toilet rooms are available on each level.
- The corridor water coolers are a mix of accessible and non-accessible units.
- The existing fire extinguisher cabinets appear to be mounted above the current code compliant reach ranges.
- Door hardware throughout the building consists of both compliant and non-compliant ADA types. The non-accessible hardware should be replaced with code compliant units.
- Accessible signage is provided at most classroom entrances and exits. Code compliant signage should be provided where not already in place.



Compliant wash station



Non-compliant guards at stair



Compliant guards at stair









No tactile "EXIT" signage

Compliant ramps

Non-compliant hardware

Means of Egress

The means of egress from the building is generally adequate based on separation distance and quantity with a few exceptions. There are egress deficiencies throughout the building that should be noted.

- A corridor on the first floor in the 4th grade wing appears to be a 'dead end' corridor as determined by the code. This corridor does not have an exit at both ends of the corridor. This condition, while not ideal, has been approved by the building code official and should not be a concern at this time. A similar corridor condition exists in the basement in the music/band corridor.
- Secondary exit doors generally have the required panic hardware and are in new condition. It was noted that at some of the doors the hardware needs adjusted to maintain good closure when not in use.
- The main entrance doors have recently been upgraded and are in good condition with the required panic hardware.
- There are exit doors directly from the office area. These doors are left from an old configuration. While not necessary to meet egress requirements, these door can remain.
- Tactile exit signage is not provided at the exterior egress doors and would be required to meet current codes.
- The stair wells may contain portions of the handrails that are not code compliant. Some handrails are configured in a "ladder" design that could allow someone to climb up and over the rail. Other rails have openings that are wider than 4". Some rails are not at the required height.
- It was observed that a classroom on the first floor level has a secondary door that opens directly into the stair tower. There are currently items being stored outside of this doorway preventing a clear path of exiting. This door is not needed as an exit from the space and should be labeled as "Not An Exit".
- Items being stored in stair towers should be removed to provide a clear path of exiting and eliminate a potential for fire starting/spreading in the stair towers.



"Dead End" corridor

ECKLES



Items stored in stairs

architecture

engineering



Code compliant panic hardware

BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 - BLACKHAWK INTERMEDIATE SCHOOL Page 7 of16

Safety and Security

Safety and security for the building is relatively good. Observations and recommendations are listed below.

- The main entrance does not contain a vestibule. A vestibule configuration would be recommended to create a safe entry to the building and a point of control for visitors entering the building. The main entry is located adjacent to the office which is desirable. In the current configuration, visitors are permitted into the building without signing into the office first. Ideally the main office would be directly connected to the main entrance vestibule which would provide direct view of the visitors at the door as well as a means for visitors to pass through the office before entering the main classroom corridor. Reconfiguring of the office area would be necessary to provide the desired adjacencies. In concept, the conference room and Principals office would switch places with the reception and waiting areas. This work would be minimal and gain much needed security at the main entrance.
- Lower level entrances/exits should be controlled by an access control system to improve the security on the lower level. These openings should also be monitored by a surveillance system with monitors located in the main office.
- The access control system in the building should be evaluated to determine if there are any upgrades needed to better control the many exterior doors.
- Secondary entrance/exit doors should be locked at all times and also provided with electronic access control systems. The secondary doors while not necessarily used for access by building occupants could be used by emergency response teams for accessing the building during emergencies.
- A meeting with the local emergency response teams could take place to discuss the access to the site and building during an emergency situation.

Exterior Envelope

The exterior envelope consists of vinyl windows, aluminum doors, brick veneer, cast-in-place concrete, Exterior Insulated Finish System (EIFS) and metal trim. Overall the exterior envelope appears to be in good condition. The exterior envelope observations and deficiencies are outlined below:

- The windows were installed in 1992 and appear to be in good condition and are insulated units thus maximizing the energy efficiency of the building.
- The main entrance exterior doors could be replaced with new units as part of the secure entrance project that is recommended.
- The existing roof is a built up system. 40,000sf of the roof was replaced in 2013. The roof may be nearing the end of its serviceable life. An evaluation should be made to confirm if additional roofing area needs replaced as well. Yearly maintenance and repairs should be done to maintain the existing roofs.
- The roof edge flashing, coping fascia and soffits are in good condition. If a roofing project is taken on, the fascia and trim should be replaced at the same time.
- Exterior caulking and sealants are brittle and cracked. New sealant and backer rods should be installed where necessary. The sealant repair should be included in the yearly building maintenance program.

ECKLES architecture

- Exposed exterior concrete is in relatively good condition. Cleaning and sealing around these items should be done as part of the yearly maintenance program.
- A masonry repair project was completed in 2010. The masonry should be monitored and cleaned yearly as part of the maintenance program. Any additional issues should be evaluated and addressed as they arise.
- The EIFS is generally in good condition but is in need of cleaning. There are yearly inspection programs that are available to outsource the repair and cleaning of EIFS systems that could be of interest.
- At the area well there are areas of delamination of the finish system. These areas should be patched to prevent further deterioration.
- There are (2) windows that have cracked glass. These should be replaced.





Cracked glazing

Wall finish delamination

Interior Finishes

The interior finishes are in relatively good condition.

- The interior wall surfaces are in good condition at this time.
- If a lighting system replacement is desired it would be recommended to replace all ceiling tiles at that time. Otherwise ceiling tiles should be replaced as necessary.
- Wall surfaces in the corridors are typically painted and are in good condition. Cleaning and touch up should be part of the yearly maintenance program.
- Wall surfaces that are painted concrete block are in good condition. Cleaning and touch up should be part of the yearly maintenance program.
- The gym floor is wood and in good condition. There were no reports of soft spots or damaged areas.
- The toilet room walls that are not tile are damaged and showing signs of wear. The school is currently repairing these areas and installing ceramic tile for better durability and cleanliness.
- At various locations of painted metal, the paint is chipped and in need of repainting.
- The flooring throughout the building is a combination of painted concrete, tile and carpet. The flooring should be replaced where damaged or a tripping hazard is present. The corridor floor tiles have been replaced in some areas and the colors do not match exactly. Where floor surfaces are painted, they should be touched up as necessary.
- The ceiling in the bakery is damaged from exposure to water. The source of the water should be determined and corrected prior to the replacement of the damaged ceilings. The severity of the damage prevents the space from being utilized for food preparation.





Floor tile patching





Bakery ceiling



Stair tower



Painted flooring



Typical classroom

Hazardous Materials

The hazardous materials in the building have been removed. There are no remaining materials that need to be abated.

<u>Kitchen</u>

Some items of the food service equipment has recently been replaced and should be satisfactory for years to come. It is noted that the boiler replacement may be necessary in the near future.

Educational spaces

The existing educational spaces, type and locations are generally acceptable based on current educational guidelines. The general classrooms are large in size and meet or exceed current standards. The desired educational programming for the future should be considered. There may be goals for delivering education that the current classroom configurations do not support. More conversations can occur with the Administration to determine the educational needs. The following indicate some areas for consideration.

- The general classrooms are adequate for the current enrollment. If different grade levels are planned for the building the current classrooms should be evaluated to determine if they are adequate for the new enrollment.
- There may be additional programs added to the district in the near future. The classrooms available should be evaluated to confirm that the curriculum for these programs can be supported.
- There are large storage rooms throughout the building that are accommodating sensory rooms, small group rooms etc. These spaces each contain a window and are sized adequately for the functions located in them.
- A dedicated science lab is provided. The location of the room is on the basement level away from the general classroom spaces. This location may be more successful located on one of the levels where the classrooms are in closer proximity.



- Dedicated strings, band and music rooms are provided. The spaces are adequate for delivering the curriculum.
- A dedicated art room is provided. The space is adequate for delivering the art curriculum.
- The library is adequate and is also located adjacent to the computer lab. This adjacency is good and allows for support between the two spaces if desired by the programming.

Architectural Recommendations

We understand at this time that the primary focus may be on other District buildings, however ongoing maintenance and capital improvements should be considered for the Intermediate School. While a major renovation may is not necessary at this time, ongoing improvements may be more appropriate based on the current budget. The District has prepared a 5 year plan of improvements for the building which should be considered closely. Prioritizing short term vs long term needs/goals should happen regularly to consider the available budget, building maintenance and needs of the District.

Currently the 5 year plan includes the following:

- Expand band area
- Install pods with laptop computers
- Add storage to recreation area.
- Evaluate quantity and location of restrooms
- Provide captured building entrance
- Replace main entrance doors (Complete)
- Replace main office carpet
- Repair ceiling of bakery
- o Repair walls and install ceramic tile around urinals and sinks in bathrooms. (Ongoing)

Exterior Improvements:

- Ongoing maintenance of concrete walks and asphalt parking areas. Resealing of asphalt on a regular bases as part of the maintenance program.
- The roof system should be evaluated to determine if any remaining areas are in need of replacement. Replacement of the roofing system would also include replacement of the perimeter metal flashing and trim.
- Clean and repair exterior masonry, including new sealant at all joints as necessary.
- Repair damaged wall surface in the area well.
- Upgrade access controls and surveillance at exterior doors.
- $\circ~$ Replace damaged glazing in existing windows where necessary.

Interior Improvements

- Reconfigure the main entry area to create a safe school entrance. This would require interior alterations at the office area as well.
- Upgrade toilet rooms as required to meet current ADA codes. Notably the vertical grab bars on the side walls should be added.
- Upgrade access controls at all exterior doors/entrances.
- Where signage does not meet current codes, install new signage to meet accessibility requirements.
- Repair damaged flooring throughout the building.

- Remove and replace suspended ceilings and tiles as necessary throughout the building. Typically this work is done in conjunction with a lighting replacement project.
- Address the water issue above the bakery and replace the ceiling once the water issue is corrected.
- Update non-accessible door hardware with compliant hardware sets.

Mechanical Systems

The school mechanical systems were completely renovated in the 1991 project. The school is heated and cooled by a combination of roof top units, split system air conditioners, unit ventilators, and air handling units. This terminal equipment is supported by an air cooled chiller with remote evaporator, two dual fuel boilers, and respective exterior condensing units. The exhaust fans serving restroom area and the kitchen are roof mounted. All equipment is original to the 1991 renovation to the building.

System Components

Chiller

• The primary source of cooling is a Trane air cooled split system chiller and two VFD driven circulating pumps in a mechanical room above the kitchen.

Boilers

• The heating water boilers are dual fuel, forced draft gas and fuel oil. Both boiler burners have a 960 MBH listed output. Two hot water pumps at 15 horse power circulate the water through the system. Only one pump operates the water through the system, with the other being redundant. The boilers are only operated using natural gas. An exterior, underground oil storage tank remains, but is not used. This tank has not been decommissioned in accordance with PA DEP requirements.

Controls

• The controls for the building are basically pneumatic. A simplistic DDC system assumes certain boiler room and scheduling functions. Robertshaw (Invensys) controls are installed.

Air Handling Units

• One air handler serves the gymnasium. It was replaced as part of the renovations in 1991. There are no reported problems with the system. Another unit serves the cafeteria. A third unit (multi-zone) serves the Library and a classroom. This system had a second cooling coil added to the discharge ductwork after the main project. This was probably done to improve humidity conditions in the library.

Split Systems

• The office area is cooled by three Mitsubishi and two McQuay split system air conditioners. No problems are reported with these units.

Unit Ventilators

• Four pipe unit ventilators are used for conditioning of most exterior zones and all classrooms in the unit vents were installed in the 1991 renovation and have had problems. The controls for the units are difficult to access due to congested piping in the UV end

compartments. There is UV casework installed on both sides. The valves and outside air dampers have been sticking causing coil freezing problems. The design intent heating pumps operate in cold weather with UV control achieved with face and bypass dampers at the coils. In extremely cold weather the chiller water pumps are also operated.

Ventilation

• Ventilation to most spaces is controlled by the unit ventilators serving them. The science rooms have continual odor problem. The problems are attributed to the animals kept in them. The office copy room is not exhausted.

Exhaust System

• The restroom and janitor closets are exhausted by roof mounted exhaust fans at each location. The dishwasher is directed vented to the roof as well as the large pizza oven in the kitchen. A 12' hood in the kitchen appears new. Make up air to the space is provided through the front of the hood.

Discussion

• One of the major problems with the HVAC system is the congested UV end compartments, making access to valve and damper motors difficult. The new Trane Chiller seems to have improved UV cooling performance. However, pneumatic controls remain, and contribute significantly to the congestion. We question whether there is air leakage into UV end compartments, and through supposedly closed OA dampers. We have observed both conditions on other projects in the past.

Recommendations

- At 24+/- year of age, most of the terminal equipment is approaching the end of its economic life.
- Replacement of the existing pneumatic control system would be very desirable. Aside from the increased control accuracy; installation of DDC controls would help to reduce UV end compartment congestion. New control valves would be installed.
- Explore the possibility of replacing the storage cabinets in each side of the UV, with a shorter storage cabinet and a UV access section.
- The recently replaced chiller with two VFD controlled pumps has significantly helped building performance and energy efficiency.
- If replacement of the UV's is not possible, a rehabilitation program could be undertaken to improve OA damper seals, and overall air leakage

Plumbing Systems

Building Fuel Type

• The natural gas entry is located on the corner of the site behind the chiller yard. Fuel is also piped to heating boilers from an underground fuel oil tank. The fuel oil system is no longer used to fire the boilers. The generator is still run on fuel oil from its own tank

Domestic Water Service

• A 2" water main enters the building and back flow prevention is provided. No pressure reduction assembly is used. A 2" water service is not adequate for a sprinkler systetem.

Domestic Hot Water System

• Three hot water recirculation pumps are used on the domestic hot water system. One pump supplies 140 degree Fahrenheit water to the kitchen. A booster heater is used by the dishwasher for high temperature supply. One recirculation pump supplies 120 degree Fahrenheit water to building fixtures. A 650 gallon hot water storage tank is installed. A "Holby" Blending Valve is used to create the 120 degree water supplied to the building. No problems were reported with the system.

Sanitary Sewer

• The waste lines from the kitchen run through a grease separator before tying into the main. A garbage disposal is installed on the dishwasher line up sink. They have an ongoing condensation problem with the kitchen coolers. No problems were reported with the drainage system.

Fire Protection

• There is no fire protection system installed in this building. The 2" water service will not support a sprinkler system.

Fixtures

• The fixtures in the building were upgraded in the 1991 renovation. No problems were reported with the equipment. There are no blending valves installed at public access lavatories.

Discussion

• The overall condition of the plumbing system in the Intermediate school is considered good. There were no reported problems with the system.

Recommendations

• Investigate condensation leakage at kitchen coolers and repair seals and/or drains as needed to prevent ongoing moisture problems in surrounding flooring and structure.

Electrical Items

Electrical Service and Central Facilities:

- The underground electrical service is provided by a 750 KVA pad mounted transformer owned by Penn Power. The service voltage is 277/480 volt.
- The building has two 800 amp main service switches. One feeds the chiller, and one feeds the main electrical distribution panel. The service switches and gear were installed in a 1991 renovation and the gear appears to be in good condition.

Wiring and Distribution:

• The service panel and local electrical panels are manufactured by Square D and were installed in the 1991 renovation. The gear appears to be in good condition and has space for future expansion.

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• The classrooms and educational spaces were upgraded in 1991 also and appear to have adequate receptacles to serve current needs. Computer rooms utilize surge suppression receptacles.

Lighting:

- Lighting fixtures are for the most part 2' X 4' recessed troffers with acrylic lens. The fixtures use older style T12 lamps. These lamps are being phased out and replaced with newer T8 fluorescent or LED lamps.
- The facility does not have automatic lighting control as required by current energy codes.
- The gymnasium uses 400 watt metal halide lamps. These fixtures are left on most of the day due to the time it takes to restart metal halide lamps.
- Exit signs utilize compact fluorescent lamps.
- The exterior lighting consists of metal halide pole and wall packs. The exterior lighting was part of the 1991 renovation.
- This site has an exterior basketball court. The pole mounted lighting is older and not part of the 1991 renovation project. This lighting uses 1000 watt metal halide pole lights and appears to be in fair condition.

Emergency Power:

- The facility is served by a 20 KW diesel fired emergency generator. The generator and day tank are located in the boiler room. This generator serves the emergency lighting and the elevator. The elevator has recently been retrofitted with a battery lowering system that will return the elevator to a designated floor upon power failure.
- The exterior diesel tank has been emptied and abandoned. The boilers now run on natural gas. This leaves the generator to draw its fuel from the 20 gallon day tank.
- The district has expressed a desire to place the heating system and the kitchen's cooler and freezer on the generator. This will require the evaluation of the emergency system to determine if the generator has the capacity to serve the additional loads. A second transfer switch will need to be added to separate the required life safety systems from non required emergency loads.

Communications Systems

- Pa:
 - This facility is served by a Rauland Telecenter IV. The main rack is located in the office area and ceiling speakers serve the classrooms and corridors. Paging is accomplished using the administration phone console.
- Clock:
 - Clocks are operated through the Telecenter rack. Digital clocks are located in the corridors.
- Telephone:
 - The telephone system in this facility is manufactured by Vodavi. The Starplus telephone system serves classroom and office areas. Classroom telephones have access to outside trunk lines.
- Special Purpose sound Reinforcement Systems:
 - The cafeteria and gymnasium have local sound systems. These systems are reported operational.

- Data and Technology:
 - This building does have fiber optic cable connecting it to the other buildings in the district. The main communication and data cabling origination board is located in the office.
 - Computer rooms have been created with wired connections.
 - The building does have wireless coverage and uses wireless access points located on the ceiling of the corridors.
 - Each classroom has a ceiling mounted projector and interactive marker board. Input jacks at the teacher's desk allow the educator to send content from the teacher's computer to the projector. No classroom sound system was observed. The small speaker in the projector or portable powered speakers from the teacher's computer must be utilized for sound.
- TV.
 - This facility does not have a television distribution system. Televisions on carts are used to view recorded programming.
- Fire Alarm:
 - This building is covered by a fire alarm system manufactured by Fire Control Instruments. The remote annunciator is located in the office.
 - The educational spaces and toilet rooms are covered by code compliant fire alarm strobe lights. Smoke and heat detectors are utilized in storage and mechanical spaces.
 - The corridor horn/strobe units and fire alarm pull stations have been installed at the proper height and locations to comply with current code.

Security:

- This facility has minimal security. One analog camera is located at the main entrance. The camera is viewed on a monitor in the office. The district no longer records the camera feed.
- The building uses motion sensors in the hallways for intrusion detection.
- The building has card access on selected exterior doors allowing district staff keyless access to the building.

General:

- This facility has been well maintained and the electrical service has the capacity for expansion. The electrical distribution is in good condition and the wiring devices are newer and adequate.
- Substantial energy savings will be realized by upgrading older style T12 lighting with newer T8 fluorescent fixtures or LED lighting. Automatic lighting control should be added to comply with current energy codes.
- The existing generator should be equipped with a larger fuel tank to facilitate longer run times during extended power outages. The unit's capacity should be evaluated to determine if the heating system could be added to the generator.
- This facility has minimal security, communication, and technology system found in modern schools today. Camera surveillance of the school and surrounding area should be considered to address the level of security required in schools today.



HIGHLAND MIDDLE SCHOOL

402 Shenango Road Beaver Falls, PA 15010 Phone: 724-843-1700 Fax: 724-843-0934 Principal: Mrs. Amy Anderson

Front Façade Image



Aerial Photo





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First Floor Plan Area A





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First Floor Area B





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First Floor Area C





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Ground Floor Area F





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<u>Timeline</u> Original Building: 1957 Renovations and Capital Improvements: 1963 Minor renovations/additions 1996 Minor renovations, abatement 2013, Major renovations/additions

Current Enrollment : Grades 6-8 545 Students

Building Square footage: 137,409 sf

Condition Commentary

<u>Overview</u>

The School was originally constructed in 1957. Additions/renovations were performed in 1963 and 1996. A substantial renovation and addition project was completed in 2013 which upgraded the building systems, functions, finishes and code compliance issues. This renovation is the most recent project undertaken by the District. The improvements completed in 2013 will allow the District to allocate budget costs for other District buildings that are in need of improvements. Ongoing maintenance should still be considered for the Middle School as part of the yearly District operation costs.

Site Accessibility

The site is relatively flat and has good circulation and accessibility.

- The circulation on the site splits the vehicular traffic from the bus traffic providing safe conditions for students and parents during morning drop off and afternoon pickup. Traffic is directed by signage as well as gates..
- The main building entrance is accessible with the use of a depressed curb ramp. The accessible route line painting is provided to delineate the accessible route from the parking spaces to the main entry.
- Accessible parking spaces are located in close proximity to the main entrance to the building.
- Accessible and pedestrian walkways are indicated with line painting providing safe circulation paths to the sidewalks and into the building.
- The sidewalk components around the building appear to be code compliant. The use of curb ramps and tactile warning strips at the bottom of the ramps meet the current code.
- The rear access to the building used by students being dropped off and picked up by busses is code compliant with the use of curb ramps and tactile warning strips at these ramps.



Main Entry Accessible Route





Vehicle Control Point



Rear Accessible Entry

BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 - HIGHLAND MIDDLE SCHOOL Page 8 of15

Building Accessibility

- Accessible circulation inside the building is very good. There are multiple stairs and ramps throughout the building that connect the various levels.
- The ramps and stairs throughout the building are code compliant.
- Public toilet rooms are up to date and accessible.
- Accessible single user toilet rooms are available on each level.
- The corridor water coolers are accessible and code compliant
- Door hardware throughout the building is code compliant
- Accessible signage is provided throughout the building and is code compliant
- Classroom sinks and casework are accessible and code compliant



Compliant wash station



Compliant ramps

Means of Egress

The means of egress from the building good and code compliant.

- Tactile Exit signage appears to be missing from the main entrance doors.
- Secondary exit doors generally have the required panic hardware and are in new condition.

Non-compliant guards at stair

• The main entrance doors are in good condition with the required panic hardware.

Compliant hardware

- Tactile exit signage is provided at the exterior egress doors throughout the building.
- The stair wells are code compliant
- The ramps are code compliant



Code Compliant Exit

ECKLES



Code Compliant Ramp

architecture

engineering



Code compliant stairs

tairs BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY



Compliant guards at stair



Compliant "EXIT" signage

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DISTRICT WIDE FACILITY STUDY Section 5 - HIGHLAND MIDDLE SCHOOL Page 9 of 15

Safety and Security

Safety and security for the building is good. Observations and recommendations are listed below.

- The main entrance is designed as a captured vestibule. This is a good control point for security into the building.
- Visitors are directed to the main entrance point which is recommended procedure for entrance to the building.
- Security camera system is in place and current.
- The access control system appears to be in good condition and should be working properly.
- Secondary entrance/exit doors should be locked at all times and also provided with electronic access control systems. The secondary doors while not necessarily used for access by building occupants could be used by emergency response teams for accessing the building during emergencies.
- A meeting with the local emergency response teams could take place to discuss the access to the site and building during an emergency situation.

Exterior Envelope

The exterior envelope consists of aluminum windows, aluminum doors, aluminum sunshades, brick veneer, metal panels and metal trim. Overall the exterior envelope appears to be in good condition.

- The exterior envelope of the building is newly updated. Yearly maintenance should be considered to keep the materials in good condition.
- The existing roof is an EPDM system. Yearly maintenance and repairs should be done to maintain the existing roofs.
- The roof edge flashing, coping fascia and soffits are in good condition. Yearly maintenance should include caulking, cleaning and inspections.
- Exterior caulking and sealants are new and in good condition. The sealant inspection and repair should be included in the yearly building maintenance program.
- The masonry is in good condition. The masonry should be monitored and cleaned yearly as part of the maintenance program. Any additional issues should be evaluated and addressed as they arise.
- The aluminum sunshades should be cleaned and monitored yearly.



Exterior masonry







Exterior delivery area

<u>Interior Finishes</u> The interior finishes are new and in good condition.

• The interior wall surfaces are in good condition at this time.



- Wall surfaces in the corridors are a combination of tile, painted drywall, wood paneling and painted concrete block and are in good condition. Cleaning and touch up should be part of the yearly maintenance program.
- Wall surfaces that are painted concrete block are in good condition. Cleaning and touch up should be part of the yearly maintenance program.
- The gym floor is wood and in good condition. There were no reports of soft spots or damaged areas.
- The toilet room walls are in good condition
- The metal door frames are in good condition. Paint touch up should be part of the yearly maintenance program.
- The flooring throughout the building is a combination of terrazzo, linoleum, tile and carpet. The flooring is in good condition at this time. Yearly maintenance should include replacing damaged material as necessary.
- The ceilings are in good condition throughout the building.



Administrative Offices



Gymnasium



Wood Paneling



Corridor finishes



LGI linoleum and wood



Typical classroom

Hazardous Materials

The hazardous materials in the building have been removed. There are no remaining materials that need to be abated.

<u>Kitchen</u>

The kitchen has been updated in the last project and is in excellent condition.

Educational spaces

The educational program was incorporated into the reconfiguration of the building for the recent renovation/addition project. The building is current and should be adequate for many years to come.



Architectural Recommendations

Exterior Improvements:

- Yearly maintenance of exterior finishes and systems is recommended.
- The roof system inspection and repair should be part of the yearly maintenance program.
- Clean and repair exterior masonry, including new sealant at all joints as necessary.

Interior Improvements

• Inspection and maintenance of the interior finishes should be part of the yearly maintenance program.

Mechanical Systems

Central Faculties

- There are three high efficiency gas boilers, each with its own circulating pump and 3-way valve.
- The heating water is circulated through the building by one of two base mounted pumps controlled by variable speed drives.
- The primary source of cooling is a split system, air cooled chiller selected for 138 tons.
- Chilled water is circulated though the building by one of two base mounted pumps, controlled by variable speed drives.
- There is no separate chiller pump to maintain flow through the evaporator

Terminal Equipment

- Many spaces in the building are served by VAV terminals, connected to rooftop units. The terminals require heating water supply on a year round basis to maintain control.
- Spaces in the music area, as well as most classrooms, are served by ducted, 4-pipe fan coil units. Tempered outside air is provided by rooftop units supplying air to the closets where the fan coil units are installed.
- The office area, gymnasium, cafeteria, and most classroom wings are served by VAV terminals.
- Rooftop units for the "annex", classroom wings, locker rooms, and gym have heat recovery wheels in them.
- Miscellaneous heat-only spaces have convectors, finned tube radiation, cabinet heaters, unit heaters, and similar hot water terminal equipment.
- Some isolated office spaces, and data closets have ductless mini-split systems.

Distribution systems

• All piping and ductwork is new.

Controls

• A new DDC control system is installed

Recommendations

• We have no recommendations for improvements at this facility.

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Plumbing Systems

Utilities

- The building is supplied with gas from a utility pressure reducing station located to the south west of the building. The piping rises to the roof at an outside wall near the locker room area mechanical room. Reference is made to the gas being "high pressure", but that pressure is not defined on the drawings. Multiple pressure reducing valves are installed at gas consuming devices, such as rooftop units and boilers.
- Water is provided through a combination of original and new piping. The main service enters the boiler room area in the basement of the "Annex". A pressure reducing valve is shown in the water service. The service is shown as a combined fire and domestic water service, through a 6" ductile iron pipe.

Central Faculties

- There are multiple gas fired hot water heater installations.
 - One single heater installation is in the music area
 - Most gang toilets have a single tank unit installed in the janitor's closet serving those toilets.
 - One three tank system is installed near the locker rooms, and serves the kitchen and locker area.
 - The hot water heating systems were all designed to store water at 140 degrees and blend it down to 110 degrees at dedicated blending valve stations.
- There is an air compressor in the boiler room that serves the shop area.

Fixtures

- The fixtures are current low flow type, where appropriate.
- Hardwires flush valves are provided for water closets, urinals, and lav units.
- Fixture accessibility seems to comply with current standards.

Distribution and piping systems

- All water supply piping is new, and leak free to the best of our knowledge..
- Underfloor sanitary piping is designed in compliance with appropriate standards; however, in reviewing the construction documents very few inverts are indicated. That does not mean that the sanitary sewers were not coordinated with foundations and other underground piping. The appropriate CAD layers may have been turned off prior to making the prints.
- Gas piping is run exposed on the roof

Fire protection

- The building is completely protected by a sprinkler system.
- A fire pump is installed in the mechanical room adjacent to the boiler room, near the water service. Recommendations
 - We have no recommendations for improvements at this facility.

Electrical Items

Electrical Service and Central Facilities:

• The building is served by a pad mounted transformer owned by Penn Power.

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- The underground secondary electrical service from the pad mounted transformer feeds the 3000 amp, three phase, 277/480 volt main electrical switchboard.
- The electrical service and main electrical gear are part of the 2011 renovation and additions project and are in the early stages of their useful life. The district does not report any problems with these systems.

Wiring and Distribution:

- Local electrical panels have the capacity for future expansion and are in the early stages of their useful life.
- The district does not report any deficiencies with this system.
- Classrooms and staff areas have adequate electrical receptacles.

Lighting:

- Lighting fixtures utilize newer energy efficient T8 fluorescent lamps and electronic ballasts.
- Building wide lighting was part of the 2011 project. Lighting levels are good and the fixtures are in the early stages of their useful life.
- This facility has automatic lighting control meeting today's energy code requirements.

Emergency Power:

- This facility is served by an exterior pad mounted 200 Kw diesel fueled emergency generator.
- The generator has a sub-base fuel tank located directly underneath the unit.
- The generator feeds the required emergency lighting in the building as well as heating equipment and the secondary electrical feed for the fire pump.
- Legally required emergency systems, heating equipment, and the fire pump are separated by the use of three transfer switches.

Communications Systems

- Pa:
 - This facility is served by a building wide paging system. This system also provides notification for the class change schedules.
- Clock:
 - The building is served by a wireless clock system with classroom analog battery powered clocks.
- Telephone:
 - Classrooms, offices, and staff areas have telephone handsets that allow calls to be placed to spaces within the building and have access to outside trunk lines.
 - The district does not report any problems with this system and it is in the early stages of its useful life.
- Special Purpose sound Reinforcement Systems:
 - The Gymnasium and auditorium have local sound systems.
 - Classrooms are equipped with Audio / Visual systems consisting of celling mounted speakers, ceiling projector, and input jacks located at the teacher's station.
- Data and Technology:
 - This facility has a dedicated data room. The building is covered by wired and wireless systems.

- The facility has adequate data outlets.
- TV.
 - The data network has the ability to stream video content.
- Fire Alarm:
 - The fire alarm was installed in the 2011 project and has audio and visual notification devices that comply with current code and accessibility standards.

Security:

- Surveillance cameras cover the corridors, building entrances, and exterior areas. Camera coverage is good.
- This facility has card access on exterior doors that allow the district staff keyless entry to the building.
- The main entry points are equipped with camera intercom stations to allow visitors to be screened before granting access.

General:

• The existing facility was renovated and additions were added in a 2011 project. All electrical and technology systems were upgraded or replaced. The district does not report any problems with this building. The electrical and technology systems are in the early stages of their useful life.



BLACKHAWK HIGH SCHOOL

500 Blackhawk Road Beaver Falls, PA 15010 Phone: 724-846-6600 Fax: 724-891-7113 Principal: Mr. Scott Nelson

Front Façade Image



Aerial Photo





BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 - BLACKHAWK HIGH SCHOOL Page 1 of 21

First Floor Area A





BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 - BLACKHAWK HIGH SCHOOL Page 2 of 21

First Floor Area B

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BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 - BLACKHAWK HIGH SCHOOL Page 3 of 21
Ground Floor Area C





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First Floor Area C





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Loft Areas A and C



Timeline

Original Building: 1972

Renovations and Capital Improvements:

2004 Fitness Center Addition

2005 Cooling tower

1992 Roof replacement

- 2009 Asbestos Abatement, District Office chiller, boiler, classroom ventilation/air handler, natatorium mechanical, gymnasium mechanical, temperature controls, domestic hot water, lighting, emergency lighting, exterior lighting, fire alarm
- 2010 tennis court/track repairs, masonry repairs, entrances, chimney,
- 2011, linestriping, pavement repairs, ADA improvements, landscaping, entrances, exterior lighting
- 2012 ADA improvements first and second floors
- 2013 linestriping, pavement repairs

Current Enrollment : Grades 9-12, 783 Students

Building Square footage: 210,000 sf



Condition Commentary

<u>Overview</u>

The School was originally constructed in 1972. Additions and renovations were performed in 2004 to add a fitness center addition. ADA improvements and mechanical system improvements were completed over the years to maintain the building. The building is in sound condition but could benefit from ongoing maintenance and improvements. The site of the building is large and very accommodating of parking, play fields and the district maintenance building. The varsity football stadium is located at Northwestern Primary Center and would be more appropriately located on the High School site. The District Office is also located in this building.

Site Accessibility

The site is relatively flat and has good circulation and accessibility.

- The circulation on the site directs vehicles around the building in a "one-way" direction. This makes for circulating the building complicated for new visitors. This circulation pattern is safe however for vehicular as well as bus traffic and seems to work well.\
- The entrance drive from the site is divided by a grass median. The direction of traffic is opposite of what is standard but works well with the one-way circulation of the site.
- The building has several entrances on multiple sides of the building. The building contains signage on the face of the building which is difficult to see when circulating the site. More significant signage could be used to make visitors more aware of the main entrance and District Office entrance.
- The main building entrance is accessible with the use of a depressed curb ramp. The accessible route line painting is provided to delineate the accessible route from the parking spaces to the main entry.
- Accessible parking spaces are located in close proximity to the main entrance to the building.
- Accessible and pedestrian walkways are indicated with line painting providing safe circulation paths to the sidewalks and into the building
- The sidewalk components around the building appear to be code compliant. The use of curb ramps and tactile warning strips at the bottom of the ramps meet the current code.
- The rear access to the building used by students being dropped off and picked up by busses is code compliant with the use of curb ramps and tactile warning strips at these ramps.
- Accessibility to the play fields and courts is good and appears to be code compliant.
- Overall the site accessibility is in excellent condition and very accommodating.



Main Entrance



Accessible route



District Office entrance





Rear entry accessible route



Fitness center accessible entry

Building Accessibility

- Accessible circulation inside the building is generally good. There are multiple stairs throughout the building that connect the various levels.
- Elevators connect the multiple levels providing the required accessibility. The elevator is nearing the end of its useful life and may need replaced. The existing shaft can be maintained and the equipment replaced to save costs. Yearly maintenance costs should be included in the budget for the district.
- The stair wells may contain portions of the handrails that are not code compliant. Some handrails are configured in a "ladder" design that could allow someone to climb up and over the rail. Other rails have openings that are wider than 4". Some rails are not at the required height. The handrail profile in some cases does not meet the current size and shape requirements. Upgrades to the stair handrails and guardrails would bring the stairways to current code standards.
- An ADA improvement project was undertaken that addressed the public toilet rooms. Not all items were addressed specifically in the toilet stalls. ADA compliant stall sizes and handrails need provided. The wall mounted lavatories need ADA compliant controls and piping guards added. Finally paper towel dispensers are not mounted at the ADA required height.
- Accessible single user toilet rooms are available on each level.
- The corridor water coolers are a mix of accessible and non-accessible units.
- Door hardware throughout the building consists of both compliant and non-compliant ADA types. The non-accessible hardware should be replaced with code compliant units.
- Accessible signage typically is not provided throughout the building. Where signage is present it is not mounted in code compliant locations/heights. The signage should be provided throughout the building where necessary.
- Casework and sinks in the classrooms are not accessible.
- The locker room showers utilize a raised curb to contain the water. This condition is not ADA accessible.
- Toilet fixtures in the locker rooms are not ADA accessible and code compliant
- The access to the stage is provided by corridors on the exterior of the auditorium. This condition does not comply with the current codes. The current requirement is that access to the stage be provided directly from the auditorium seating area. The incorporation of a platform lift or ramp system is required to meet current codes.
- The accessibility of the natatorium should be evaluated to determine if upgrades are required at this point. Accessible lifts/hoists are typically used to provide code required accessibility in existing facilities.
- The locker rooms are not currently served by an elevator to the first floor. This would be an upgrade to provide better accessibility to this area of the building.

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BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 - BLACKHAWK HIGH SCHOOL Page 8 of 21

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Non Compliant stairs



Non-compliant sinks



Non compliant toilets



Compliant single user toilet



Non compliant showers

Means of Egress

The means of egress from the building is generally adequate based on separation distance and quantity with a few exceptions. There are egress deficiencies throughout the building that should be noted.

- Corridors at the corners of the classroom wings appears to be a 'dead end' corridor as determined by the code. This corridor does not have an exit at both ends of the corridor. This condition, while not ideal, is and existing condition and has been approved by the building code official and should not be a concern at this time.
- Secondary exit doors generally have the required panic hardware and are in good condition.
- The district office doors contain panic hardware.
- Tactile exit signage is not provided at the exterior egress doors and would be required to meet current codes.
- The stair wells may contain portions of the handrails that are not code compliant. Some handrails are configured in a "ladder" design that could allow someone to climb up and over the rail. Other rails have openings that are wider than 4". Some rails are not at the required height. The handrail profile in some cases does not meet the current size and shape requirements. Upgrades to the stair handrails and guardrails would bring the stairways to current code standards.
- Items being stored in stair towers should be removed to provide a clear path of exiting and eliminate a potential for fire starting/spreading in the stair towers.









Code compliant panic hardware

"Dead End" corridor

Items stored in stairs

Safety and Security

Safety and security for the building is relatively good. Observations and recommendations are listed below.

- The main entrance doors are located remotely from the main office and do not provide a captured entrance. The entrance doors utilize an access control system, however once allowed access to the building the access is into a stair tower, which could allow visitors access to other areas of the building before signing in at the office. A vestibule configuration would be recommended to create a safe entry to the building and a point of control for visitors entering the building. Ideally the main office would be directly connected to the main entrance vestibule which would provide direct view of the visitors at the door as well as a means for visitors to pass through the office before entering the main classroom corridor. Reconfiguring of the office area would be necessary to provide the desired adjacencies. A significant interior renovation would be necessary to achieve this condition.
- Secondary entrances/exits are controlled by an access control system to improve the security. These openings should also be monitored by a surveillance system with monitors located in the main office.
- The access control system in the building should be evaluated to determine if there are any upgrades needed to better control the many exterior doors.
- Secondary entrance/exit doors should be locked at all times and also provided with electronic access control systems. The secondary doors while not necessarily used for access by building occupants could be used by emergency response teams for accessing the building during emergencies.
- A meeting with the local emergency response teams could take place to discuss the access to the site and building during an emergency situation.
- An access control system is utilized at the entrance to the District Office both from within the HS Auditorium lobby as well as the exterior.

Exterior Envelope

The exterior envelope consists of aluminum windows, aluminum doors, brick veneer and metal trim. Overall the exterior envelope appears to be in good condition. The exterior envelope observations and deficiencies are outlined below:

- The windows are original to the building and could be replaced with energy efficient units.
- The main entrance exterior doors were replaced in 2010/2011 and are in good condition.
- The existing roof is a built up system. 126,000sf of the roof was replaced previously. The roof may be nearing the end of its serviceable life. An evaluation should be made to confirm if additional roofing area needs replaced as well. Yearly maintenance and repairs

ECKLES architecture engineering BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 - BLACKHAWK HIGH SCHOOL Page 10 of 21

should be done to maintain the existing roofs. The district may have plans to replace portions of the roof over the upcoming years. This concept would reduce the impact on the budget and spread the expense out over the next several years.

- The roof edge flashing, coping fascia and soffits are in good condition. If a roofing project is taken on, the fascia and trim should be replaced at the same time.
- Exterior caulking and sealants are brittle and cracked. New sealant and backer rods should be installed where necessary. The sealant repair should be included in the yearly building maintenance program.
- A masonry repair project was completed in 2010. The masonry should be monitored and cleaned yearly as part of the maintenance program. Any additional issues should be evaluated and addressed as they arise.
- Building signage at entrances could be upgraded as part of a site wayfinding project which would include more descripting instructions on access around the site and into the building.



Brick veneer



Building signage



Roofing

Interior Finishes

The interior finishes are in relatively good condition but showing signs of age.

- The interior wall surfaces are in good condition at this time. The walls consist of tile and painted surfaces. The grout joints may contain pencil and pen markings and should be cleaned yearly. Painted wall surfaces should be touched up as part of the yearly maintenance program.
- If a lighting system replacement is desired it would be recommended to replace all ceiling tiles at that time. Otherwise ceiling tiles should be replaced as necessary.
- It is noted that plaster ceiling repair is planned for the upcoming years. Notably plaster repair in the kitchen, auditorium and pool will be included in the upgrades.
- Wall surfaces that are painted concrete block are in good condition. Cleaning and touch up should be part of the yearly maintenance program.
- The gym floor is wood and in good condition. There were no reports of soft spots or damaged areas. The gym floor was recently refinished. Replacement is scheduled for the upcoming years and should be budgeted accordingly.
- The toilet room walls are typically tile and in good condition. The flooring in the toilet rooms is stained and showing signs of wear.
- At various locations of painted metal, the paint is chipped and in need of repainting.
- The flooring throughout the building is a combination of terazzo, tile, vinyl composition tile and carpet. The flooring should be replaced where damaged or a tripping hazard is present. It is noted that flooring replacement projects are planned over the upcoming years. Notably the Dance Studio sub floor and carpet replacement.
- Casework throughout the building is showing signs of wear. It is noted that casework repair/replacement is planned for upcoming years.

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- The gymnasium bleachers are showing signs of wear and may be at the end of their useful life. The current bleachers do not provide the required handrails or ADA seating spaces. A bleacher replacement project in the upcoming years may be included in the capital improvement projects for the building.
- The gym locker rooms are generally in good condition. Upgrades to the lockers were recently completed. ADA accessibility upgrades should be considered to the shower and toilet facilities.
- The second floor corridors are carpet and showing signs of wear.
- Main entry vestibules have concrete flooring which is durable and easy to maintain. The use of carpet runners allow for cleaning of foot traffic before entering the building.
- The lockers throughout the building are quite narrow and most likely don't accommodate the student's belongings. Replacing the current lockers with larger units may be desirable.
- The current display cases are showing signs of age. Upgrading the cases, while primarily aesthetic, would provide a welcome upgrade to the corridors.



Stained flooring



2nd Floor corridor flooring



Paneling at walls



Vestibule Finishes



Typical corridor finishes



Gymnasium

Hazardous Materials

The hazardous materials in the building have been removed. There are no remaining materials that need to be abated.

<u>Kitchen</u>

Some items of the food service equipment has recently been replaced and should be satisfactory for years to come. A workflow evaluation by a kitchen designer may be desirable to determine if any upgrades to the kitchen would increase efficiency and lower operating costs. The current configuration of serving multiple dining areas is unique to this building and may have room for improvement.

Educational spaces

The existing educational spaces, type and locations are generally acceptable based on current educational guidelines. The general classrooms are large in size and meet or exceed current

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BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 - BLACKHAWK HIGH SCHOOL Page 12 of 21

standards. The desired educational programming for the future should be considered. There may be goals for delivering education that the current classroom configurations do not support. More conversations can occur with the Administration to determine the educational needs. The following indicate some areas for consideration.

- The general classrooms are adequate for the current enrollment. The classrooms should be evaluated to determine if any upgrades are required to support the future educational goals of the District.
- There may be additional programs added to the district in the near future. The classrooms available should be evaluated to confirm that the curriculum for these programs can be supported.
- Storage throughout the building appears to be adequate.
- The science labs may need upgrades to support the desired curriculum. Additional conversations with the Administration would be required to determine what if any upgrades are required.
- The music department is quite nice and contains many useful spaces for practice and instruction of both choral and instrumental curriculum. The adjacency to the auditorium is good.
- The library is adequate and also contains computer work station. The function of the library should be evaluated to determine if it is currently supporting the current needs of the students. Often libraries are converted into more advanced media centers that are tailored to the way students gain information with technology available today. The space is also used for Board meetings which would benefit from upgrades to the space and technology.

Architectural Recommendations

We understand at this time that the primary focus may be on other District buildings, however ongoing maintenance and capital improvements should be considered for the High School. While a major renovation may not be feasible at this time, ongoing improvements may be more appropriate based on the current budget. The District has prepared a 5 year plan of improvements for the building which should be considered closely. Prioritizing short term vs long term needs/goals should happen regularly to consider the available budget, building maintenance and needs of the District.

Currently the 5 year plan includes the following:

- Upgrade the media center
- Add additional conference rooms
- New lockers in corridor
- New trophy cases
- Additional storage rooms
- Add elevator between locker rooms and first floor
- o Auditorium renovations
- o Greenhouse renovation
- New storage facility for vo-ag
- New PA system
- Captured entrance at main entry/office.
- o LGI space

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• Entrance to dance studio.

Exterior Improvements:

- The roof system should be evaluated to determine if any remaining areas are in need of replacement. Replacement of the roofing system would also include replacement of the perimeter metal flashing and trim. The roofing replacement could be handled all at one time or split up over the upcoming years.
- Clean and repair exterior masonry, including new sealant at all joints as necessary. This work should be part of the yearly maintenance program.
- Upgrade access controls and surveillance at exterior doors.
- Evaluate entrance doors and glazing and repair as part of the yearly maintenance program.

Interior Improvements

- Reconfigure the main entry area to create a safe school entrance. This would require interior alterations at the office area as well as adjacent spaces.
- Upgrade toilet rooms as required to meet current ADA codes. Notably the partitions should provide the required clear floor space and the grab bars updated.
- Address code-compliance deficiencies of interior components including tactile room signage, tactile exit signage, mounting heights of toilet accessories.
- Evaluate and upgrade access controls at all exterior doors/entrances where necessary.
- Where signage does not meet current codes, install new signage to meet accessibility requirements.
- Repair damaged flooring throughout the building.
- Repair damaged ceiling finishes throughout the building. Typically this work is done in conjunction with a lighting replacement project.
- Update non-accessible door hardware with compliant hardware sets.
- Upgrade non-accessible drinking fountains and plumbing fixtures throughout the building.
- Upgrade egress components as required to meet code. Notably the stair guards and handrails should be upgraded for safety and code compliance.
- Locker room accessibility issues should be addressed including access to showers, toilet fixtures and access.

Mechanical Systems

System Description

The school's mechanical distribution system is mostly original to the building from 1971. A number of pieces of central equipment have been upgraded in recent years—as described below. The school is heated and cooled by a combination of large central station built-up air handling units, and a Carrier Moduline VAV terminal system that has been retrofitted with variable air volume terminal boxes with hot water reheat. The air side system is supported by two water cooled centrifugal chillers with remote cooling tower, and four high efficiency gas fired boilers. The exhaust fans serving restroom areas and the kitchen are roof mounted. The office and administration areas of the building are served by separate VAV rooftop units



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System Components

Chillers

• The two chillers serving the building are manufactured by Trane; and were installed as part of a recent performance contract. The larger (300 ton) chiller uses R-123 refrigerant and the smaller one (100 ton) uses R-134a refrigerant. The condensing water is circulated to a BAC Model 15325-2 two cell cooling tower with a remote, indoor, underground holding tank. Variable speed drives were added to the cooling tower fans to reduce power consumption. The cooling tower was replaced 5 years ago. The condensing water pumps are controlled by variable speed drives. The chilled water system was designed as a primary/second pumping scheme. The two primary pumps circulate water thru the chillers and the two secondary pumps circulate water through the building. The secondary pumps have variable speed drives

BOILERS

• Four Thermal Solutions boilers (installed in the Trane performance Contract) provide heating to the hot water system for the school. A total capacity of 8,800 MBH capacity is provided. Two hot water pumps circulate the water through the system. The hot water pumps are configured in a duty/standby arrangement and each are equipped for variable speed pumping. The boilers are only operated using natural gas. There are pumps in heating system piping at various locations to circulate heating water through radiation at the outside wall—on a zoned basis.

PUMPS

• There were a number of pumps replaced as part of the Trane Contract. They indicated 14 new pumps were installed. Nine of the pumps have variable speed drives.

WATER SOURCE HEAT PUMP SYSTEM / WATER

COOLED

• The main office and administration areas of the building were served by a separate water source heat pump system, which has been decommissioned. The units remain in place, but do not work.

CLASSROOM VENTILATION SYSTEM

- The classrooms throughout the building are served by a large central station air handling unit (two total for the school} and the supply air is distributed to the classrooms via a variable air volume system with terminal reheat. The air-side system varies the volume of supply air delivered to the space in response to the space temperature as sensed by the room thermostat. The VAV boxes are equipped with hot water heating coils. A perimeter radiation system provides additional heating to the rooms.
- The units are of double wall construction and supply air to this variable air volume system. The units consist of a return air fan section, mixing box, bag filters, air blenders, hot water heating coil, chilled water coil, supply air fan section, sound absorption section, and a supply air discharge plenum section. The supply air fans have been replaced as part of the Trane Performance Contract. Each of the two air handling systems has two fans in parallel. The fans are controlled by variable speed drives. The coils have been replaced at the same time

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that the fans were installed. The air handling units are in excellent condition. The Performance contract also included the replacement of all of the original Carrier "Moduline" system powered VAV terminals with new VAV boxes and supply ductwork.

NATATORIUM

• The natatorium is served by a 16,000 CFM rooftop air handling unit. New stainless steel ductwork is hung from structure high within the space. The pool water is heating by a heat exchanger which is served by the domestic hot water heating system. We were advised that the pool water treatment/filtration system had been upgraded. There was no sensation of chloramine laden air, which is a good indication that pool water chemistry is under control. All of the above work was done as part of the Trane Performance Contract.

GYMNASIUM

• The gymnasium is served by five air handling units hung from structure high within the space. The units are tied into the building chilled water system for cooling and the building hot water heating system for heat. The chilled water coil is not equipped with a temperature control valve and the supply air Gymnasium air handling units temperature is controlled by a face and bypass damper within each unit The hot water heating coil is equipped with a three-way temperature control valve for heating capacity control Some backdraft dampers are missing on the relief air hoods. These systems are scheduled to be replaced with two air handling systems as part of the Trane Performance Contract.

EXHAUST SYSTEM

• The restroom and janitor closets are exhausted by roof mounted exhaust fans at each location. The dishwasher is served by a dedicated exhaust fan. Most science classrooms are equipped with a general exhaust fan controlled by a wall mounted switch with pilot light. The kitchen equipment is served by a canopy-style exhaust hood. Makeup air is provided separately to the space by a makeup air unit. A dust collection system serves the wood shop. The dust collector was installed in 2003 and is in reasonable condition. The dust collection ductwork is installed in a crawl space below the floor.

TEMPERATURE CONTROLS

• The temperature controls for the school were replaced with Trane DDC controls as part of the Trane performance contract.



Discussion

The mechanical system serving the building was state of the art at the time it was installed (1971) and has served the building well. Certain major parts of the system were well past their expected service life. Most of those items were addressed in the Trane Performance Contract. An argument can be made that the 1971 system concept may not be appropriate for a new high school to be constructed now. We cannot comment on the engineering that formed the basis for the Trane upgrades because we were not privy to that process or the discussions that took place between Trane and the District. It does appear to us that Trane's upgrades have added many years to the building's useful life; and have made savings in energy and maintenance expenditures possible.

Recommendations

- The nature of the 1971 system concept, albeit now incorporating new and more efficient components, will require a continuation of an ongoing maintenance program. Trane's savings projections will have to be verified on an ongoing basis throughout the life of their contract. Routine maintenance on many components will still be the District's responsibility. We recommend that the District structure their own maintenance program around Trane's contractual responsibilities so as to insure that Trane can, in fact, be held to all the terms of their contract.
- As components fail, consider the failure as an opportunity to improve building efficiency even more.
- We recommend no immediate actions be taken.

Plumbing Systems

System Description

The water and sanitary waste are provided by the local municipalities. Natural gas is also provided on site. There are no major problems reported with the plumbing systems. System Components:

FUEL SYSTEM

• A large natural gas line enters the building at the boiler room. The natural gas is piped to the hot water boilers and the domestic water heaters as the main source of fuel. Natural gas is also piped to the science classrooms and kitchen. Each science classroom is provided with an emergency shut down switch at the exit door that is connected to a solenoid valve on the natural gas supply to each room.

DOMESTIC WATER SERVICE

• A 6" diameter water main enters the building for domestic water usage. The incoming water service is not equipped with a backflow preventer. The static water pressure to the building is approximately 64 psi. District maintenance personnel have indicated problems with existing gates valves.

DOMESTIC HOT WATER SYSTEM

• Two new Thermal Solutions high efficiency hot water heaters were installed as part of the Trane Performance Contract. The domestic hot water is circulated from the boiler to a large

domestic hot water storage tank located on the mechanical mezzanine. The storage tank is maintained at 140 deg. F. and supplied out to the building at 140 deg. F. There is only one main domestic hot water loop for the building (140 deg. F.). There are master mixing valves (Lawler) located at each coach's office in the locker rooms which regulate the domestic hot water temperature to the showers. A booster heater at the dishwasher takes the hot water temperature from 140 deg. F. to 180 deg. F. for cleaning dishes and utensils.

• The pool water heater is virtually identical to the domestic water heater.

POOPL EQUIPMENT

• The pool water filtration, disinfection, and circulating pump systems were replaced as part of the Trane Contract.

FIRE PROTECTION

• A sprinkler system with fire pump were added as part of the Trane Performance Contract. The kitchen hood is protected by an Ansul wet chemical system with manual pull station.

SANITARY SEWER

• The building's sanitary lines are connected to the municipal sewage treatment system. The sanitary lines leaving the kitchen are served by a grease interceptor located outside of the building before connection with the sanitary main. The acid waste from the science classrooms is carried away via glass piping with glass vent stacks routed up through the roof. Where work has been done on this glass piping system, the leaking section was replaced by plastic acid waste piping. School District personnel reported that there is no acid neutralization basin serving the acid waste system. This should be explored further. To install an expensive glass acid waste system without some means of neutralization was not consistent with good engineering practice. One problem associated with the visible sanitary sewers in chases and above the first floor is that the piping was done with screwed galvanized pipe. This was not consistent with typical engineering practice at the time—which would have been cast iron pipe with lead and oakum joints.

FIXTURES

• The plumbing fixtures located throughout the building are mostly original. Lavatories are wall mounted with non-metered faucets. The water closets are floor mounted and equipped with Sloan Royal flush valves with manual operators. The urinals and water closets are all wall mounted and have been retrofitted with Zurn sensor battery operated flush valves (locker rooms only). The electric water coolers throughout the building are mostly original. The showers in the locker rooms are both shower stand units and 3-head wall mounted units equipped with Simmons mixing valves. Shower room drains are not at the perimeter of the room as required by current codes. The wall mounted 3-head shower enclosures are worn but appear to be functional.

Discussion

The overall condition of the plumbing systems for the school are dated, but in fair condition. Recommendations

• Provide a new acid waste system for the science classrooms complete with acid neutralizer.



- Replace the original plumbing fixtures with low water consumption models that meet ADA accessibility standards.
- Provide a backflow preventer on the Incoming water service.
- Provide a dedicated 140 deg. hot water line to the kitchen and a master mixing valve to serve bldg.
- Replace all gates valves with new ball valves.

Electrical Items

Electrical Service and Central Facilities:

- The existing electrical service is supplied by Penn Power. The underground primary service serves a pad mounted transformer outside the electrical room and the secondary service rises up on the exterior of the building where it enters the upper level electrical room.
- The main electrical gear is manufactured by General Electric. The 4000 amp 277/480 volt gear is original to the building. Space has been depleted for the installation of additional fused units and spare parts are difficult to obtain.

Wiring and Distribution:

- Most of the local electrical panels and circuits in the facility are original and no longer have space for expansion and parts are difficult to obtain.
- Some newer panels have been added over the years in an attempt to keep up with the increased demand for computers and electronic equipment used in today's schools.
- Original classrooms have minimal receptacles. Additional receptacles have been added in some areas using surface raceway.
- In parts of the building that have not been renovated, receptacles serving toilet rooms, or in the areas around art room and lab sinks do not have Ground Fault protection as required by current code.

Lighting:

- Most of the lighting in the building has been replaced with energy efficient T8 lamps and electronic ballast.
- Lighting in mechanical spaces that were originally lamped with incandescent lamps has been re-lamped with retrofit compact fluorescent lamps.
- The building does not have automatic lighting control required by current code.
- The metal halide fixtures originally serving the gymnasium have been replaced with energy efficient fluorescent fixtures.

Emergency Power:

- The existing Onan 125 KW natural gas fueled generator is located in the electrical room. The unit is functional, but the district reports problems with the engine. Parts are hard to obtain.
- The unit does not have a radiator and uses city water cooling. When the generator runs, city water is run through the engine and is discharged into a drain. This type of cooling is inefficient and uses a great deal of water. A disruption in the buildings water service will prevent the generator from running.
- The generator only serves emergency lighting and communications. Building heating equipment in not served by the generator.

- The emergency lighting phase sensing relay panel is original and some of the relays have failed.
- Emergency battery operated lighting units were observed in some areas of the facility.

Communications Systems

- Pa:
 - The paging system is original and manufactured by Bogan. The system consists of classroom speakers and call-in buttons. This system is beyond its useful life expectancy.
- Clock:
 - The clock system appears to be the original simplex system and is failing. Corridor clocks no longer operate. Battery powered clocks have been installed in the classrooms. The clock system runs the class change bells.
- Telephone:
 - Telephone handsets are located in each classroom, office, and staff area.
- Special Purpose sound Reinforcement Systems:
 - The gymnasium, pool, and auditorium have local sound systems. The systems are reported to be operational.
 - Typical classrooms do not have local sound systems to serve the ceiling projectors or voice amplification for the teachers. Some spaces use the small speakers in the projector, or portable powered speakers attached to the teachers computer or interactive marker board.
- Data and Technology:
 - Category-5 data cabling and wireless access points have been added over the years to serve teacher stations, computer rooms, and office areas.
 - Surface raceway is used to run cabling.
 - Data racks and enclosures are not located in secure or temperature controlled spaces.
- TV.
 - The facility is served by Comcast. The building has a television studio and has the ability to distribute cable television content and in house programs over the cable distribution system.
- Fire Alarm:
 - The original fire alarm system has been replaced with a newer system manufactured by Simplex. The building has audio and visual notification devices installed in the proper locations and mounting heights to conform to current code.

Security:

• The building has surveillance cameras covering the main corridors, entrance doors, and partial parking area. The cameras are cabled back to digital recorders. Although the building has fair camera coverage, the district would like to increase the number of cameras to monitor stair towers and additional exterior areas.

General:

- The electrical service gear is antiquated but functional. Any renovation or addition to this facility should include an electrical gear upgrade.
- Most spaces have higher levels of lighting than recommended by today's standards. Lighting has been upgraded in the renascent past, but additional energy savings will be realized by

adding code compliant automatic lighting control, reduction in lighting levels, and taking advantage of newer fluorescent and LED technology.

• Security may be improved by increasing the camera coverage to include stair towers, public areas such as gymnasium and auditorium, and exterior recreation and parking areas.



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DARLINGTON ATHLETIC BUILDING

256 Elmwood Blvd Darlington, PA 16115



Aerial Photo





BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 - DARLINGTON ATHLETIC BUILDING Page 1 of 7

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Floor Plan



<u>Timeline</u> Original Building: 1972 Renovations and Capital Improvements: 2004 metal fascia repairs, roof replacement 2010 masonry repairs

Building Square footage: 3,800sf

Condition Commentary

Overview

The building was constructed in 1972. The building was originally constructed as a multi-purpose room addition to the Darlington Elementary School. The elementary school was demolished while this building remained. At some point after the demolition an entrance addition was added to the original building. The building currently serves as the high school wrestling program. The location of the building is remote from the High School which provides logistical challenges for transportation and scheduling. The building is useful at this time and if Northwestern Primary Center is to remain in operation this building could serve the District for athletics as well as temporary classroom space during a renovation at Northwestern.

Site Accessibility

The site is relatively flat and has good circulation and accessibility.

- The parking spaces provided do not contain an accessible parking space. This could be provided by linestriping and signage.
- An accessible route into the building is not currently delineated but could easily be accommodated.

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- The paving on the site is bituminous asphalt and concrete walks are not present.
- The main entrance to the building is not currently accessible due to a raised door sill above the adjacent paving. The height is approximately 4" and could be eliminated with a sidewalk or sloping of the paving leading to the door.
- The secondary entrance/exit doors are also not on grade and not accessible but could be corrected in a similar way as the main entrance door.
- The main doors are made up of (2) 2'-6" wide doors which is not code compliant. The doors should be replaced with one 3'-0" wide door with a 2'-0" sidelight.

Building Accessibility

- Accessible circulation inside the building is generally good in the main gym area.
- The toilet rooms and showers are not accessible and need upgrades to comply with the current codes.
- Door hardware throughout the building consists of non-compliant types. The non-accessible hardware should be replaced with code compliant units.
- Accessible signage is not provided throughout the building. The signage should be provided throughout the building to meet current codes..
- The locker room showers utilize a raised curb to contain the water. This condition is not ADA accessible.
- Interior doors are too narrow to be code compliant and should be made wider.

Means of Egress

The means of egress from the building is generally adequate based on separation distance and quantity. Deficiencies are noted below:

- The main entrance/exit door is not an accessible means of egress due to a raised door sill above the adjacent paving. The height is approximately 4" and could be eliminated with a sidewalk or sloping of the paving leading to the door.
- The secondary entrance/exit door is not an accessible means of egress due to a raised door sill above the adjacent paving. The height is approximately 4" and could be eliminated with a sidewalk or sloping of the paving leading to the door.
- Tactile exit signage is not provided at the exterior egress doors and would be required to meet current codes.
- Exit signage is not provided and should be provided at all exit doors.
- Panic hardware is not provided at the exit doors. If the main exit door is replaced with a code compliant unit panic hardware should be provided.

Safety and Security

Safety and security for the building is poor. Observations are listed below.

- There is no security camera system in the building.
- There is no access control system in the building.

Exterior Envelope

The exterior envelope consists of aluminum windows, aluminum doors, brick veneer and metal trim. Overall the exterior envelope appears to be in good condition. The exterior envelope observations and deficiencies are outlined below:

• The windows are original to the building and could be replaced with energy efficient units.

- The exterior doors are non-insulated units. They should be replaced.
- The existing roof is fully adhered EPDM system. The roof was installed in 2004. The roof may be nearing the end of its serviceable life. An evaluation should be made to confirm if the roof needs replaced now or in the near future. Yearly maintenance and repairs should be done to maintain the existing roofs.
- The roof edge flashing, coping fascia and soffits are in good condition. If a roofing project is taken on, the fascia and trim should be replaced at the same time.
- Exterior caulking and sealants are brittle and cracked. New sealant and backer rods should be installed where necessary. The sealant repair should be included in the yearly building maintenance program.
- A masonry repair project was completed in 2010. The masonry should be monitored and cleaned yearly as part of the maintenance program. Any additional issues should be evaluated and addressed as they arise.

Interior Finishes

The interior finishes are in good condition.

- The interior wall surfaces are primarily painted concrete masonry units and are in good condition
- The flooring is typically vinyl composition tile. The main wrestling room has mats covering the floor surface.
- The ceilings are exposed roof deck and structure. Painting these surfaces would improve lighting levels.

Hazardous Materials

The 2013 AHERA report indicated 400sf of hazardous floor tile and mastic in the building. If upgrades are performed at the building these items should be removed according to all regulations and safety procedures.

Architectural Recommendations

We understand at this time that the primary focus may be on other District buildings, however ongoing maintenance and capital improvements should be considered for the athletic building. By addressing the maintenance needs yearly as part of capital improvements the usefulness of the building will be prolonged and the budget impacts will be less spread over the years.

Exterior Improvements:

- The roof system should be evaluated to determine if any remaining areas are in need of replacement. Replacement of the roofing system would also include replacement of the perimeter metal flashing and trim. The roofing replacement could be handled all at one time or split up over the upcoming years.
- Clean and repair exterior masonry, including new sealant at all joints as necessary. This work should be part of the yearly maintenance program.
- Replace exterior doors with code compliant units that are energy efficient.
- Provide site improvements to provide accessible route into the building as well as accessible egress from the building.
- Delineate the handicapped parking space by line striping and signage.

• Delineate the accessible route into the building with line striping and signage.

Interior Improvements

- Upgrade toilet and shower rooms as required to meet current ADA codes. Notably the partitions should provide the required clear floor space and the grab bars updated. The showers should also be updated.
- Address code-compliance deficiencies of interior components including tactile room signage, tactile exit signage, mounting heights, etc.
- Where signage does not meet current codes, install new signage to meet accessibility requirements.
- Update non-accessible door hardware with compliant hardware sets.
- Upgrade non-accessible drinking fountains and plumbing fixtures.
- Upgrade egress components as required to meet code.

Mechanical Systems

System Description

The "Annex" was part of an elementary school that was constructed on the western portion Northwestern Primary Center site, prior to the construction of the currently used building. At some point in time, the majority of this elementary school was torn down, leaving only the gymnasium and toilet/shower facilities. We have seen no drawings for the classroom portion of the building. It appears that the current Annex was an (1972 +/-) addition to a then existing classroom building. The boiler in the basement of the classroom part of the building was replaced in 1971. The rooms on the north end of the gym were originally built as small gang toilets and a kitchen. These spaces have been updated over the years. Showers were added in what was the kitchen area.

Heating and Ventilation System

Four horizontal, ducted, electric heat H&V unit ventilators were installed when the addition was constructed. It is our understanding that these units are no longer operational. The current heat source is two gas fired unit heaters in opposite corners of the space. When the classroom portion of the building was demolished, the boiler room went with it. The toilets and showers area currently have electric resistance heaters installed. Exhaust is accomplished using a combination of wall and ceiling mounted exhaust fans.

As it is currently configured, without a functional source of tempered outside air, this building should not be used regularly for any sort of continued human occupancy. With the possible exception of the resistance heaters, the heating terminal equipment either does not work, or is approaching the end of its useful life. A complete HVAC system replacement should be considered.

Plumbing Systems

It appears that the original elementary school was served by a small septic system located near the southwest corner of the parking lot that would be constructed for original high school (now Northwestern Primary Center). The drawings show the sanitary sewer leaving the north east corner of the Annex, turning south, then connecting to an "existing" sewer. The oly explanation that makes sense would be a reference to the small septic system that served the elementary school. Due to the relative elevations, we believe that this septic system, which is separate from the main system serving the Primary Center, must remain in operation.



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Based on our discussions with GLA water Consultants, we believe that the Annex receives water from the Primary Center. They recommend installation of a recirculation line between the Primary Center boiler room and the Annex to move chlorinated water through the water service to the Annex. This would mean replacing the existing water service, and placing a second pipe adjacent to it.

When the boiler was replaced in 1971, a 4"gas line was extended to the main that ultimately serves the primary center. We believe that this gas line was modified and relocated to serve the gas fires equipment in the Annex.

Most of the fixture installed in the Annex appear to be replacements, and are in reasonable condition. The piping for the two gang toilets appears to be chased in an outside wall, which would subject it to possible freeze up. The shower piping is mostly exposed and does not have any thermostatic protection or pressure limiting features. This is contrary to current code. Lavatories available to the public should have temperature limiting devise; and these do not.

A relatively new gas fired hot water heater is installed.

Most of the fixtures and piping would have to be replaced to make this facility compliant with current codes.

Electrical Items

Electrical Service and Central Facilities:

- A pad mounted transformer serves the main 800 amp main electrical gear. The gear has a 600 amp fused main switch.
- Service voltage is 3 phase, 120/208 volt.

Wiring and Distribution:

• Most wiring devices in the building are original and past their useful life.

Lighting:

- The lighting in this facility is older style T12 fluorescent. The lighting in the gymnasium is T12 fluorescent High Output.
- This facility does not have automatic lighting controls required by current code.

Emergency Power:

- This facility does not have an emergency generator. Emergency lighting is accomplished with battery powered lighting units and battery powered exit signs.
- There are no emergency lighting units at the exterior of the egress points as required by current code.

Communications Systems

- Pa:
 - There are no paging systems in this facility.
- Clock:
 - There are not clock systems in this facility. Standalone clocks are used.
- Telephone:
 - There are telephones in the office area but none in the gym or other parts of the facility.
- Special Purpose sound Reinforcement Systems:
 - No local sound system for the gymnasium was observed.

- Data and Technology:
 - This building does not have data cabling.
- TV.
 - This facility does not have television cable service.
- Fire Alarm:
 - o This facility does not have a fire alarm system

Security:

• This facility does not have camera surveillance, intrusion detection, or card access systems.



MAINTENANCE BUILDING

500 Blackhawk Road Beaver Falls, PA 15010 Phone: 724-846-6600 Mr. Jim Perlik, Supervisor of Buildings and Grounds

Front Façade Image





Aerial Photo





BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 - MAINTENANCE BUILDING Page 1 of 6

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<u>Timeline</u> Original Building: 1992 Renovations and Capital Improvements: 2010 masonry repairs 2011, walks, doorways, parking lots, ADA improvements 2013 walks, doorways, parking lots

Building Square footage: 21,600 sf

Condition Commentary <u>Overview</u>

The building was constructed in 1992. Maintenance repairs have taken place between 2010-2013. The building is spacious and accommodates the District storage and equipment. The building includes a main maintenance bay with offices. Six additional storage bays provide storage for district materials and equipment. Overall the building is in good condition. Ongoing maintenance should be performed as required yearly.

Site Accessibility

The site is relatively flat and has good circulation and accessibility.

- The parking spaces provided do not contain an accessible parking space. This could be provided by linestriping and signage.
- An accessible route into the building is not currently delineated but could easily be accommodated.
- Access to the storage bays are by way of a paved plaza which is in good condition and allows easy access to the overhead doors.

Building Accessibility

- Accessible circulation inside the building is generally good.
- An ADA improvement project was completed in 2011 which addressed some deficiencies at that time.
- Accessible single user toilet rooms are available on each level.
- Door hardware throughout the building consists of both compliant and non-compliant ADA types. The non-accessible hardware should be replaced with code compliant units.
- Accessible signage typically is not provided throughout the building. Where signage is present it is not mounted in code compliant locations/heights. The signage should be provided throughout the building where necessary.
- Toilet room ADA improvements are necessary to meet the current codes.

Means of Egress

The means of egress from the building is generally adequate based on separation distance and quantity.

- Secondary exit doors are provided from the storage bays. The doors exit to the rear of the building which is not landscaped. An exit pathway should be provided from the exit doors.
- Tactile exit signage is not provided at the exterior egress doors and would be required to meet current codes.



• Exit signage is not provided and should be provided at all exit doors.

Safety and Security

Safety and security for the building is relatively poor. Observations and recommendations are listed below.

- The access control system in the building should be evaluated to determine if there are any upgrades needed to better control the many exterior doors.
- Secondary entrance/exit doors should be locked at all times. The secondary doors while not necessarily used for access by building occupants could be used by emergency response teams for accessing the building during emergencies. An access control system could be installed at a secondary entry point to facilitate emergency response access.
- An access control system is utilized at the main entrance door.
- A limited security alarm system is in place. The system should be evaluated to determine if the system needs upgraded to better protect the building and District equipment and materials.

Exterior Envelope

The exterior envelope consists of aluminum windows, steel doors, split face concrete masonry units and metal trim. Overall the exterior envelope appears to be in good condition. The exterior envelope observations and deficiencies are outlined below:

- The windows are original to the building and could be replaced with energy efficient units.
- The exterior doors are original to the building and should be replaced with new units.
- The overhead doors are in good working order. Some of the panels are damaged from impacts and could be replaced. Three of the doors are manually operated and could be upgraded to utilize electric door operators.
- The existing roof is fully adhered EPDM system. The roof is original to the building. The roof may be nearing the end of its serviceable life. An evaluation should be made to confirm if the roof needs replaced now or in the near future. Yearly maintenance and repairs should be done to maintain the existing roofs.
- The roof edge flashing, coping fascia and soffits are in good condition. If a roofing project is taken on, the fascia and trim should be replaced at the same time.
- Exterior caulking and sealants are brittle and cracked. New sealant and backer rods should be installed where necessary. The sealant repair should be included in the yearly building maintenance program.
- A masonry repair project was completed in 2010. The masonry should be monitored and cleaned yearly as part of the maintenance program. Any additional issues should be evaluated and addressed as they arise.

Interior Finishes

The interior finishes are in good condition.

- The interior wall surfaces are primarily un painted concrete masonry units and are in good condition
- The flooring is sealed concrete and is in good condition.
- The maintenance and storage bays have exposed roof deck and structure.

• The office has suspended acoustical tile ceiling that is in good condition.

Hazardous Materials

Hazardous materials are not present in the building.

Architectural Recommendations

We understand at this time that the primary focus may be on other District buildings, however ongoing maintenance and capital improvements should be considered for the maintenance building. By addressing the maintenance needs yearly as part of capital improvements the usefulness of the building will be prolonged and the budget impacts will be less spread over the years.

Exterior Improvements:

- The roof system should be evaluated to determine if any remaining areas are in need of replacement. Replacement of the roofing system would also include replacement of the perimeter metal flashing and trim. The roofing replacement could be handled all at one time or split up over the upcoming years.
- Clean and repair exterior masonry, including new sealant at all joints as necessary. This work should be part of the yearly maintenance program.
- Replace entrance doors.
- Repair overhead door panels.
- Landscape the rear of the building to accommodate an exit path from the rear exit doors.

Interior Improvements

- Upgrade toilet rooms as required to meet current ADA codes. Notably the partitions should provide the required clear floor space and the grab bars updated.
- Address code-compliance deficiencies of interior components including tactile room signage, tactile exit signage, mounting heights, etc.
- Evaluate and upgrade access controls at all exterior doors/entrances where necessary.
- Where signage does not meet current codes, install new signage to meet accessibility requirements.
- Update non-accessible door hardware with compliant hardware sets.
- Upgrade non-accessible drinking fountains and plumbing fixtures.
- Upgrade egress components as required to meet code.

Mechanical Systems

- The building is heated and ventilated using gas fired equipment. Storage only areas have gas fired unit heaters. Vehicle storage and maintenance areas have similar heating units, as well as roof mounted, direct fired gas make-up air units.
- Ventilation rates (using exhaust fans and the above referenced make-up air units) were appropriate for the time of the design (1990).
- A roll-up carbon monoxide exhaust unit was installed to support vehicle maintenance.
- Roof mounted exhaust fans were used, where appropriate.
- Most of the original equipment that remains in use, is approaching the end of its useful life.
- Possible improvements could include a CO/NO₂ detection system to automatically control ventilation according to vehicle use. It is doubtful that this system would pay for itself in terms of energy savings.

Plumbing Systems

- The gas service for this building originates in the High School boiler room. It extends, underground, across the intervening paved area.
- The water service also starts in the High School and follows a similar path to this building.
- The sanitary sewer connects to a manhole in a sewer that ultimately serves the high school.
- Storm sewers were collected at downspout locations and tied into an existing manhole at the back of the building. It appears that the building was built over an existing main storm sewer.
- Plumbing fixtures are typical of the time of design. As fixtures fail, they should be replaced with newer low-flow units.
- There is a grease/oil interceptor on the sewer from the automotive maintenance bays.

Electrical Items

Electrical Service and Central Facilities:

- The existing electrical service is supplied underground from the High School. The service entrance is rated at 200amp, 277/480 volts. The panel board is in good condition.
- The main electrical gear is manufactured by Square D.
- Branch panels are rated at 175amp, 120/208 volts. The panel is original to the building. Spares are available.

Wiring and Distribution:

- The location and distribution of receptacles is limited based on the use of the building. Extension cords are used to provide power where needed.
- GFI receptacles are not utilized near sinks and the existing receptacles should be replaced with GFI type.
- Upgraded distribution should be considered to increase the functionality of the building.

Lighting:

- Most of the lighting in the building has been replaced with energy efficient T8 lamps and electronic ballast.
- Lighting in mechanical spaces that were originally lamped with incandescent lamps has been re-lamped with retrofit compact fluorescent lamps.
- The building does not have automatic lighting control required by current code.
- The metal halide fixtures originally serving the gymnasium have been replaced with energy efficient fluorescent fixtures.

Emergency Power:

- The existing lighting is typically pendant mounted utility fixtures. These fixtures use fluorescent T-12 lamps.
- The office area utilizes recessed fluorescent fixtures.
- There are no illuminated exit signs in the building which would be required to meet current code.
- The exterior lighting appears adequate. Additional fixtures or upgrades could be considered.
- There is no emergency generator. Adding a generator is recommended.

Communications Systems



- Pa:
 - An intercom system is used to communicate between the garage bays and the office. Two way communication is available.
- Telephone:
 - Telephone line is from the High School.
- Fire Alarm:
 - There is no fire alarm system in the building.

Security:

• A security system is present in the building. Motion detectors are located in the storage bays. The main entrance uses an access control system with keypad for arming/disarming the system. Local alerts are made by speakers on the exterior of the building. The security system should be tied into the local emergency response teams for added security.



Probable Costs

The recommended improvements for the buildings based on the evaluations that took place as part of this study are general. The specific scope of improvements would need to be determined by working closely with the Board of Directors, Administration and facilities department. Considerations would consider the District's budget, educational goals and immediate maintenance needs throughout the District. The items below are typical categories of work scope with related costs based on market trends. At this time a unit cost formula is used to estimate costs. More detailed cost estimates would be developed as the specific scope is confirmed.

- EXTERIOR ENVELOPE REPAIRS/MAINTENANCE
 - a. Repointing brick masonry +/- \$12 / square foot
 - b. Repointing CMU masonry +/- \$12 / square foot.
 - c. Roofing replacement +/- \$25 / square foot
 - d. Aluminum framed single FRP doors +/- \$700 per door
 - e. Aluminum framed double FRP doors +/- \$1100 per door
 - f. Aluminum/Glass single door and frame +/- \$2500 per door
 - g. Aluminum/Glass double door and frame +/- \$4000 per door
- WINDOW REPLACEMENT
 - a. Window replacement \$30-\$40/square foot
 - b. Entrance system replacement \$40-\$50 / square foot.
- MEP INFRASTRUCTURE IMPROVEMENTS
 - a. Mechanical System Upgrades +/- \$30/square foot
 - b. Electrical system upgrade +/- \$25/sf
 - c. Plumbing system upgrade +/- \$18/sf
- ACCESSIBILITY UPGRADES
 - a. Upgrade building signage +/- \$75 / door
 - b. Upgrade wayfinding signage +/- \$85 per sign
 - c. Upgrade door hardware to ADA compliant type- \$200 \$300 / door
 - d. Upgrade drinking fountains to ADA compliant type \$1000 \$2000 per unit.
 - e. Upgrade non accessible toilet rooms
 - i. Reconfiguring of walls/partitions/plumbing lines \$50 \$100 / square foot
 - ii. Provide ADA toilet compartment +/- \$1000
 - iii. New standard toilet compartment +/- \$600
 - iv. New ADA grab bars \$50 per unit
 - v. New compliant toilet \$2000 \$3500 per fixture
 - f. Install new elevator and machine room \$50,000 \$65,000
 - g. New ADA toilet room construction +/- \$150- \$200/square foot.
 - h. New compliant concrete ramp +/- \$7 / square foot
 - i. New ADA compliant handrail at ramp +/- \$50 / linear foot
 - j. New ADA compliant casework (including p.lam counter top) +/- \$180 / linear foot

- MEANS OF EGRESS UPGRADES
 - a. Replace steel stair guardrails with code compliant system +/- \$150/linear foot
 - b. Replace wall mounted handrails with code compliant system +/- \$50/ linear foot
 - c. Replace or repair stair treads +/- \$50/linear foot
 - d. New LED exit signs +/- \$300 \$400 per unit
 - e. New panic hardware +/- \$600 \$800 per unit
- INTERIOR FINISH UPGRADES
 - a. Replace carpeting +/- \$30/square yard
 - b. New ceramic tile flooring +/- \$5 \$7 / square foot
 - c. New VCT flooring including rubber base +/- \$3 \$4/ square foot
 - d. Replace ceilings +/- \$3.25 \$4.00 / square foot
 - e. New paint on walls +/- \$.60 \$1.00 / square foot
 - f. New furred walls and drywall to conceal damaged walls +/- \$5.00 \$6.50/square foot.



Section 5 – Energy Studies

Section 5 includes energy studies of the existing facilities. This information is used to determine the performance and efficiency of the building systems. The PDE requires that the EPA/DOA Portfolio Manage Tool is used to create the studies. The results of these studies take into account the existing building programming, size, configuration and yearly energy costs. This information documents the existing performance of the buildings and is used as a benchmark which can then be used to evaluate the proposed alterations to the building systems. The energy benchmarking component is critical for exploring the options available to the District.



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BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 – ENERGY STUDIES Page 1 of 6



Signature:

Licensed Professional

J. Christopher Miller 222 North Beaver Street New Castle, PA 16101 724-652-5507 jcm@ecklesgroup.com



Professional Engineer Stamp (if applicable)



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 – ENERGY STUDIES Page 2 of 6



EARN MORE AT energystar.gov

ENERGY STAR[®] Statement of Energy Performance



Blackhawk Intermediate School (AUN-127041603)

National Median Comparison

Annual Emissions

CO2e/year)

National Median Site EUI (kBtu/ft²)

National Median Source EUI (kBtu/ft²)

% Diff from National Median Source EUI

Greenhouse Gas Emissions (Metric Tons

Primary Property Function: K-12 School Gross Floor Area (ft²): 92,000 Built: 1930

ENERGY STAR® Score¹

For Year Ending: February 28, 2015 Date Generated: June 23, 2015

1. The ENERGY STAR score is a 1-100 assessment of a building's energy efficiency as compared with similar buildings nationwide, adjusting for climate and business activity.

Property & Contact Information

Property Address Blackhawk Intermediate School (AUN-127041603) 635 Shenango Road Beaver Falls, Pennsylvania 15010

Property Owner Blackhawk School District 500 Blackhawk Road Beaver Falls, PA 15010

Primary Contact Jim Perlik 500 Blackhawk Road Beaver Falls, PA 15010 724-506-1801 perlikj@bsd.k12.pa.us

Property ID: 4414443

Energy Consumption and Energy Use Intensity (EUI)

Site EUI 86.6 kBtu/ft2

Annual Energy by Fuel Electric - Grid (kBtu) 3,205,939 (40%) Natural Gas (kBtu) 4,758,500 (60%)

Source EUI

163.7 kBtu/ft2

Signature & Stamp of Verifying Professional

Name/verify that the above information is true and correct to the best of my knowledge.

23/15 Date: 6 Signature:

Licensed Professional

J. Christopher Miller 222 North Beaver Street New Castle, PA 16101 724-652-5507 jcm@ecklesgroup.com



Professional Engineer Stamp (if applicable)



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 – ENERGY STUDIES Page 3 of 6

80.1

8%

897

151.6


ENERGY STAR[®] Statement of Energy Performance



Highland Middle School (AUN-127041603)

Primary Property Function: K-12 School Gross Floor Area (ft²): 133,107 Built: 1959

ENERGY STAR® Score¹

For Year Ending: February 28, 2015 Date Generated: June 23, 2015

1. The ENERGY STAR score is a 1-100 assessment of a building's energy efficiency as compared with similar buildings nationwide, adjusting for climate and business activity.

Property & Contact Information

Property Address Highland Middle School (AUN-127041603) 402 Shenango Road Beaver Falls, Pennsylvania 15010 Property Owner Blackhawk School District 500 Blackhawk Road Beaver Falls, PA 15010

Primary Contact Jim Perlik 500 Blackhawk Road Beaver Falls, PA 15010 724-506-1801 perlikj@bsd.k12.pa.us

Property ID: 4414446

Energy Consumption and Energy Use Intensity (EUI)

Site EUI 84 kBtu/ft² Annual Energy by Fuel Electric - Grid (kBtu) 4,463,173 (40%) Natural Gas (kBtu) 6,712,900 (60%)

Source EUI

158.2 kBtu/ft2

Signature & Stamp of Verifying Professional

(Name) yerify that the above information is true and correct to the best of my knowledge.

National Median Comparison

Annual Emissions

CO2e/year)

National Median Site EUI (kBtu/ft²)

National Median Source EUI (kBtu/ft²)

% Diff from National Median Source EUI

Greenhouse Gas Emissions (Metric Tons

23/15 Signature: Date:

Licensed Professional

J. Christopher Miller 222 North Beaver Street New Castle, PA 16101 724-652-5507 jcm@ecklesgroup.com



(if applicable)



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 – ENERGY STUDIES Page 4 of 6

84.6

159.4

1.253

-1%



ENERGY STAR[®] Statement of Energy Performance



Patterson Primary (AUN- 127041603)

Primary Property Function: K-12 School Gross Floor Area (ft2): 30,000 Built: 1969

ENERGY STAR® Score¹

For Year Ending: February 28, 2015 Date Generated: June 23, 2015

1. The ENERGY STAR score is a 1-100 assessment of a building's energy efficiency as compared with similar buildings nationwide, adjusting for climate and business activity.

Property & Contact Information

Property Address Patterson Primary (AUN- 127041603) 701 Darlington Road Beaver Falls, Pennsylvania 15010

Property Owner Blackhawk School District 500 Blackhawk Road Beaver Falls, PA 15010

Date: 6/23/15

Primary Contact Jim Perlik 500 Blackhawk Road Beaver Falls, PA 15010 724-506-1801 perlikj@bsd.k12.pa.us

Property ID: 4414453

Energy Consumption and Energy Use Intensity (EUI)

Site EUI 90.2 kBtu/ft2

Annual Energy by Fuel Electric - Grid (kBtu) 679,801 (25%)

Natural Gas (kBtu) 2.027,600 (75%)

Source EUI 142.1 kBtu/ft2

Signature & Stamp of Verifying Professional

Signature:

Najhe) verify that the above information is true and correct to the best of my knowledge.

National Median Comparison

Annual Emissions

CO2e/year)

National Median Site EUI (kBtu/ft²)

National Median Source EUI (kBtu/ft²)

% Diff from National Median Source EUI

Greenhouse Gas Emissions (Metric Tons

Licensed Professional

J. Christopher Miller 222 North Beaver Street New Castle, PA 16101 724-652-5507 jcm@ecklesgroup.com



(if applicable)



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 – ENERGY STUDIES Page 5 of 6

116.6

183.6

-23%

244



Northwestern Primary (AUN-127041603) 256 Elmwood Blvd Darlington, Pennsylvania 16115

Property Owner Blackhawk School District 500 Blackhawk Road Beaver Falls, PA 15010 1

Primary Contact Jim Perlik 500 Blackhawk Road Beaver Falls, PA 15010 724-506-1801 perlikj@bsd.k12.pa.us

Property ID: 4414448

Energy Consumption and Energy Use Intensity (EUI)

Annual Energy by Fuel Site EUI 136.3 kBtu/ft2 Electric - Grid (kBtu) 1,498,308 (15%) Natural Gas (kBtu) 8,587,800 (85%)

National Median Comparison National Median Site EUI (kBtu/ft²) 93.5 National Median Source EUI (kBtu/ft²) 127.3 % Diff from National Median Source EUI 46% Annual Emissions Greenhouse Gas Emissions (Metric Tons 757 CO2e/year)

Source EUI 185.4 kBtu/ft2

Signature & Stamp of Verifying Professional



Licensed Professional

J. Christopher Miller 222 North Beaver Street New Castle, PA 16101 724-652-5507 jcm@ecklesgroup.com



(if applicable)



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY Section 5 – ENERGY STUDIES Page 6 of 6

SECTION 6 – OPTIONS CONSIDERED

Section 6 constitutes construction options explored by the District. The analysis illustrates options available to the District based on the information contained in this study, existing building conditions, enrollment capacity, enrollment projections and the costs of each option.

6. An analysis of construction options. The analysis must address:

- a. the alternatives available to the school district based on the above analysis
- b. cost estimates for each alternative
- c. the pros and cons for each alternative
- d. a summary page depicting options and costs.
- e. Energy Portfolio Surveys

OPTIONS CONSIDERED

Option Summary	þage 2
Option A	pages 3 - 8
Option B	pages 9 - 11
Reimbursement Calculation	page 12
Probable Schedule/Phasing	page 13
Recommendation	pages 14



Summary of Options for Consideration

The options considered at this time by the Board of School Directors focuses on Northwester Primary Center. This facility is located farthest from the District's geographic center and therefore must be considered carefully to determine if maintaining or closing the school is right for the District.

Option A – CLOSE NORTHWESTERN AND RELOCATE STUDENTS

This option would relocate the students from Northwestern into other District buildings. This option would leave the District with the decision of what to do with the Northwestern building. In addition to relocating the students, the stadium and wrestling functions could be relocated to the High School campus. The following would be the new grade level groupings at each building.

Northwestern Primary School

No students

Patterson Primary School

Grades PK – K

Based on the current district enrollment as of May, 2015, this scenario would result in 7 kindergarten classrooms with 25 students in each class. The four Pre-K classes would be maintained in their current enrollment and would accommodate up to 25 children in each room.

Blackhawk Intermediate School

Grades 1-4

Based on the current district enrollment as of May, 2015, this scenario would result in (9) first grade classrooms with 20 students in each room, (9) second grade classrooms with 21 students in each room, (8) third grade classrooms with 21 students in each room and (8) fourth grade classrooms with 23 students in each room.

<u>Middle School</u>

Grades 5-7

Based on the current district enrollment as of May, 2015, this scenario would require (8) classrooms for the relocated fifth grade population. If (8) classrooms are provided, each room would have 23 students.

<u>High School</u>

Grades 8 - 12

Based on the current district enrollment as of May, 2015, this scenario would require (7) classrooms for the relocated eighth grade population. If (7) classrooms are provided, each room would have 23 students.

Option B – CONTINUED USE OF NORTHWESTERN

Continue the use of Northwestern Primary Center in its current grade configuration. This study has made recommendations regarding improvements to address existing deficiencies. The scale of renovation can be determined after further discussions with the Board, Administration and facilities group. This study provides cost estimates on a moderate renovation and an extensive renovation. See the Probable Cost section for more information on each renovation scope.



<u>Option A</u> Close Northwestern, Shift Enrollment to other District Schools

Pros and Cons:

Capacity

• While the District's other schools can accommodate the current Northwestern enrollment, shifting the enrollment into the other 4 schools causes grade realignment and effectively fully utilizes those school buildings. This means that if there is an increased enrollment in the future due to development outside or inside the District (planned or yet to be planned housing developments or the proposed cracker plant and development associated with the cracker plant) or the State and District chooses to expand and provide early childhood education (pre-school), there would not be excess capacity to handle the increase or change in educational program. The result would be a need to construct new spaces to accommodate the additional students or increase in class size to handle "bubbles in enrollment" or enrollment increases because of development.

Program

- Some of spaces that would be needed to accommodate the Northwestern students currently accommodate other uses such as storage or offices, these uses would have to be accommodated elsewhere within the building or District or done away with such as storage spaces. Some spaces that would be repurposed to house the Northwestern students would need to be altered or upgraded into spaces appropriate for classroom use. There would be a cost for the upgrades and alteration in the other existing buildings since those spaces would not be temporary in nature and the new enrollment would need code compliant classroom space. If the Board chose to close Northwestern and shift the enrollment there would have to be improvement projects for some of the buildings especially BIS.
- Closing Northwestern eliminates the availability of using a full size Gymnasium and locker/dressing rooms for other District uses. The same holds true for the Athletic building (wrestling annex). It does not make sense to maintain those venues if the site is not used for education. The continued use of the gym and wrestling annex becomes an expensive proposition. The existing heating system a Northwestern is in need of upgrades. Without replacement the existing school would be unable to be used for anything before too long. The option of maintaining only the gym and locker/dressing rooms is impractical since the whole building's systems are located in another part of the school. The idea of razing all but the gym and cafeteria area would mean developing another mechanical space in the remaining portion of the building. The option would be costly considering it would be done mostly for continued athletic use.
- Shifting students to other schools with their respective current enrollment puts the students into a much larger pool of students eliminating the education experience of "the small school"
- Closing Northwestern eliminates a local (neighborhood) school. South Beaver, Enon Valley, Darlington and Darlington Township lose a community asset.

ECKLES architecture

BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY SECTION 6 – OPTIONS CONSIDERED Page 3 of 16

Budget

- It seems that in one way or another there will be need to have capital expenditures moving forward. Either because of comprehensive upgrades to Northwestern or because of necessary upgrades to prepare classroom space for Northwestern's enrollment in other District schools. There will most likely be operational costs associated with preparing the existing classroom for the relocated students. There most likely will be moving costs with relocating furniture/materials from Northwestern. We estimate these operational costs in the range of \$50,000 \$100,000
- Closing and razing Northwestern would in itself be \$200,000 to \$300,000 so the option of moving students to the remaining District schools is not without considerable cost if you consider the cost to accommodate the increased enrollment in the existing schools plus the cost to raze Northwestern or to partially raze Northwestern and make the necessary alteration to continue to use a portion for athletics.
- Closing and selling Northwestern may partially offset some of the costs to upgrade the existing school to accommodate the additional students.
- Closing the Northwestern requires the District conduct a public hearing per Act 780



Option A Building Utilization Plans

The following floor plans test the scenario of relocating the students from Northwestern to the other District buildings. These diagrams focus on Patterson Primary Center and Blackhawk Intermediate School to illustrate the grade realignments and the classroom capacities that can be expected based on the current District enrollment.





BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY SECTION 6 – OPTIONS CONSIDERED Page 5 of 16



Price Page 6 of 16





BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY SECTION 6 – OPTIONS CONSIDERED Page 7 of 16





BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY SECTION 6 – OPTIONS CONSIDERED Page 8 of 16

Option B Renovate Northwestern to current standards

Pros and Cons: Program

- Maintains the school as a community asset, able to accommodate Darlington residents and additional program spaces and enrollment fluctuations.
- Maintains and improves the school for auxiliary uses such as community use and athletics.
- Leaves additional space in other District schools to accommodate enrollment fluctuations and maintains space in all buildings for their current uses. Northwestern has space for enrollment growth as well as additional program spaces.
- Provides a modern primary center for current enrollment meeting current standards.
- Security would be improved with development of a secure main entrance and office.
- The classrooms and teaching spaces would become more appropriate for primary students.
- Accessibility for the disabled would be provided in the upgrade, the building would be code compliant.
- If the football stadium is moved to the high school campus, the existing play fields (football and baseball) can be maintained and repurposed as community sports venues, as such with upgrades to the school these facilities would have access to toilets in the recently upgraded school. Both the school students and community currently use the existing play structures, this could continue. If the site is divested and sold community use may be lost depending on the new owner.

Value and Operational Savings

- The existing building structure and site development at Northwestern is in relatively good condition, renovating the school capitalizes on the inherent value of the structure and avoids spending capital resources on site improvements. The unit cost to upgrade Northwestern would be a fraction of the cost of new construction elsewhere in the District.
- Maintains the current value of the existing building. The existing building structure still has years of useful life, maintaining the school avoids the loss of that value. In other words, Northwestern Primary School has more value to the Blackhawk School District than another party.
- Renovation improves the building and systems efficiency reducing operational costs. Replaces outdated heating, plumbing and electrical systems. Installs air conditioning, data



and telecommunications systems and security systems.

- Postpones maintenance related capital expenditures at Northwestern for many years.
- Eliminates or postpones the expenditure of capital resources on other existing schools.
- The site sanitary sewage system is being evaluated to determine the appropriate steps to maintain, repair or replace this system. Regardless of the final outcome or cost of upgrading the sewage system, its cost is small in comparison of the proposed project cost (about 2%). It shouldn't be considered a deal breaker if we do not know the exact solution or total cost of improvements to the site sanitary system at this time.

Probable Cost Estimates

Existing building – 77,000 sf

To determine probable construction cost estimates for renovations to the Northwestern Primary School a unit cost formula is used. The unit costs values have been developed based on the current understanding of the needs of the facility and the current construction market trends. A range in costs is considered that will cover moderate renovation scope to an extensive renovation scope. Discussions in the future with the Board, Administration and facilities staff will help to define the desired scope of improvements to the facility which will impact the unit cost price.

The moderate renovation scope will include upgrading items that are necessary for the prolonged use of the facility. The items included will be primarily HVAC, Plumbing and Electrical in nature. By addressing the MEP systems, the infrastructure of the facility will be upgraded for a serviceable life of 20-25 years. The architectural items will focus on items that are necessary for the efficient performance of the MEP systems including ceiling replacement and the exterior wall improvements. The exterior windows and glass block may be replaced with a combination of smaller energy efficient windows and solid, insulated wall infills. Minor improvements may be included to address code compliance, hazardous materials abatement and safety. Interior construction will be limited and only focus on isolated areas that are in great need of repairs or upgrades.

The extensive renovation scope will include the items of the moderate renovation scope as well as interior improvements. The interior improvements will include upgrading finishes throughout the building with new materials. The interior spaces may be reconfigured to provide better performing spaces and flexibility. The goal for the extensive renovation scope will be to redefine the facility into a modern, advanced facility focused on delivering education to the primary grade levels.

Moderate renovation scope – 77,000sf x \$110 = \$8,470,000 Construction cost (Including sewage system) Construction cost + 20% soft cost = **\$10,164,000 Project Cost**

Extensive renovation – 77,000sf x \$150 = \$11,550,000 Construction cost (Including sewage system) Construction cost + 20% soft cost = **\$13,853,000 Project Cost**



A sample PlanCon Part A budget worksheet is provided below to illustrate the probable project costs.

	PROJECT ACCOUNTING BASED ON ESTIMATES					
Bla	rtet/erc: skhawk School District	Northwestern Primary Sch	lool		Grades:	K - 2
PRO	JECT COSTS		NEW	EXIS	TING	TOTAL
д.	STRUCTURE COSTS (INCLUDING BUILD) FURCHASE AMOUNT, SITE DEVELOPMENT ROUGH GRADING TO RECEIVE BUILDING ROOF REPLACEMENT AND REPAIR, ASB ABATEMENT, OWNER'S CONTROLLED IN PROGRAM AND BUILDER'S RISK INSUR	ING F, S, SSTOS SURANCE ANCE)		11,15	0,000	11,150,000
в.	ARCHITECT/ENGINEER'S FEE ON STRUG AND EPA-CERTIFIED PROJECT DESIGN FEE ON ASBESTOS ABATEMENT	CTURE ER'S		780,500		780,500
c.	MOVABLE FIXTURES AND EQUIPMENT AND ARCHITECT'S FEE			334	,500	334,500
D.	STRUCTURE COSTS, ARCHITECT'S FEE, MOVABLE FIXTURES & EQUIPMENT - TOTAL (A plus B plus C)	,		12,26	5,000	12,265,000
Ξ.	SANITARY SEWAGE DISPOSAL AND SITE ACQUISITION COSTS			428	,000	428,000
F.	STRUCTURE COSTS, ARCHITECT'S FEE, MOVABLE FIXTURES & EQUIPMENT, AND SITE COSTS - TOTAL (D plus E	}		12,69	3,000	12,693,000
G.	G. ADDITIONAL CONSTRUCTION-RELATED COSTS (INCLUDING PROJECT SUPERVISION, ARCHITECTURAL PRINTING, TOTAL DEMOLITION OF ENTIRE EXISTING STRUCTURES AND RELATED ASBESTOS REMOVAL, CONTINGENCY) Is total demolition of the entire existing building part of this project? If yes, report these costs (including asbestos removal, architect's fees, OCIP and other related costs)			900,000		
н.	N. FINANCING COSTS (INCLUDING UNDERWRITER'S FEE, LEGAL FEES, FINANCIAL ADVISOR, CAPITALIZED INTEREST AND PRINTING)			260,000		
I. TOTAL PROJECT COSTS (F plus G plus H)			13,853,000			
DET	AILED STRUCTURE COSTS (Breakout c	osts for Line A. "Exi	sting".)			EXISTING
J.	J. SITE DEVELOPMENT Are changes to existing playgrounds, athletic fields, driveways, sidewalks or other existing site improvements part of this project? If yes, report these costs including architect fees.			600,000		
к.	ASBESTOS ABAFEMENT Is asbestos abatement part of th: these costs including EPA-certif	is project? If yes, ied project designer	report fees).			125,000
L.	ROOF REPLACEMENT Is roof replacement part of this these costs including architect	project? If yes, re fees.	port			
М.	BUILDING PURCHASE AMOUNT					
SI	E ACQUISITION COSTS					TOTAL
И.	SITE ACQUISITION {INCLUDING CONT COMPENSATION, APPRAISAL FEES AND	RACT SALES PRICE OR J ALLOWABLE SETTLEMENT	UST COSTS)			
BII	DATE					
٥.	PROPOSED BID OPENING DATE (MM/YY):				05/16
RE	VISED JULY 1, 2010	FORM EXPIRE	S 6-30-12			PLANCON-A04



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY SECTION 6 – OPTIONS CONSIDERED Page 11 of 16

PDE Reimbursement Calculations

There is currently state reimbursement available to the District if a substantial renovation project is taken on at Northwestern. The calculation is based on the current enrollment at the building as of May, 2015 plus 10%. Based on the formula that is currently being used by the PDE and the District's aid ratio, the reimbursement amount is \$3,143,360. This equates to a state subsidy of 14% with a local share responsibility of the School District of 86% Considering the current restructuring taking place at PDE, the time frame for receiving this reimbursement is unknown. The District should be prepared to cover the entire cost of the project at this time until the reimbursement is distributed from the State in the future.



Probable Construction/Phasing Schedule

The following diagram explores the possibility of the construction process occurring while students are still in the building. While removing the students from the building during construction would be ideal, the option to relocate the students within the building and even to the Athletic Building is possible. This concept would allow for areas of the building to be cleared of students while construction takes place. This concept may extend the construction time due to the fact that the construction would need two summers to complete the major portions of the work while students are on summer break. By relocating the students to other buildings during construction, the construction time may be reduced by 3-4 months.



Probable Pre-Design Schedule - Time Line

Begin Schematic Design Phase	July 2015
Begin Design Development Phase	October 2015
Begin Construction Documents Phase	January 2016
Begin Bidding Phase	April 2016
Receive Bids	May 2016
Award Contracts	Mid May
Commence Construction	June 2016
Construction Phase 1	Summer 2016
Construction Phase 2	Fall 2016
Construction Phase 3	Spring 2017
Construction Phase 4	Summer 2017
Substantial Completion	August 2017



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY SECTION 6 – OPTIONS CONSIDERED Page 13 of 16

Energy Study for Option B



Property ID: 4468746 AUN: 127041603

mes@ecklesgroup.com

Architect Of Record Eckles Architecture and Engineering 222 North Beaver Street New Castle, PA 16101

perlikj@bsd.k12.pa.us **Property Owner**

Blackhawk School District 500 Blackhawk Road Beaver Falls, PA 15010

Estimated Design Energy			
Fuel Type	Usage	Energy Rate (\$/Unit)	
Electric - Grid	395,486 kWh (thousand Watt-hours)	Not Provided	
Natural Gas	6,545 MBtu (million Btu)	Not Provided	
Estimated Design Use Details			
K-12 School			
Gross Floor Area	74,000 Sq. Ft.		
High School	No		
Gymnasium Floor Area	8,500 Sq. Ft.		
Percent That Can Be Cooled	80		
School District	Blackhawk		
Percent That Can Be Heated	All of it - 100%		
Number of Computers	79		
Number of Walk-in Refrigeration/Freez	er Units 2		
Months in Use	12		
Student Seating Capacity	326		
Cooking Facilities	Yes		
Number of Workers on Main Shift	38		
Weekend Operation	Yes		



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY **SECTION 6 – OPTIONS CONSIDERED** Page 14 of 16

Design Energy and Emission Results				
Metric	Design Project	Median Property	Estimated Savings	
ENERGY STAR Score (1-100)	52	50	N/A	
Energy Reduction (from Median)(%)	-2.3	0	N/A	
Source Energy Use Intensity (kBtu/ft²/yr)	150	153	3	
Site Energy Use Intensity (kBtu/ft²/yr)	106	109	3	
Source Energy Use (kBtu/yr)	11,109,361	11,374,096	264,735	
Site Energy Use (kBtu/yr)	7,894,399	8,082,522	188,123	
Total GHG Emissions (Matria Tons CO2a)	55,766	102,100	2,376	
Total OHO Emissions (Metric Tons CO2e)	610	035	10	
Designed to earn the ENERGY STAR	: Application Checklist	_	_	
This section is only required if you are using this document to apply for Designed to Earn the ENERGY STAR. All design projects that achieve an EPA energy performance score of 75 or higher are eligible for this certification.				
 Does the intended function or use for th property type that's eligible to receive an 	e property match the criteria of a n ENERGY STAR score?	Yes	No/Not Sure	
If you are not sure that your propert ENERGY STAR score, please desc	y design is eligible for a design ribe the property's major functions:			
2) Is the design project at least 95% comp If no, please explain:	lete with construction documents?	Tes Yes	■ No	
3) Is the property unoccupied and not yet	generating energy bills?	Yes	No No	
4) Do energy calculations account for the and all energy sources?	whole building intended operations	Yes	No No	
5) Is the Architect of Record (AOR) an EN	ERGY STAR partner?	Yes	No No	
6) Will the AOR review the SEDI with build Owner Letter of Intent?	ling owner before they sign the	Yes	No No	
 Do the AOR and Building Owner agree this document in ENERGY STAR program 	that EPA may use information from am materials?	Yes	No No	
8) Are you seeking other qualifications for	this design project?	Yes	No No	
If so, please select all that apply:				
AIA 2030 Commitment Architecture 2030 Challe Federal, State or Local C Green Globes LEED Other, please indicate:	enge Disclosure Ordinance			



Professional Verification

(Name) verify that the above information is true and correct to the best of my knowledge.

Signature: _____Date: ____Date: _____Date: _____Date: ____Date: _____Date: ____Date: _____Date: ____Date: ____Date: ____Date: ____Date: _____Date: ____Date: ____Date: ____Date: ____Date: ____Date: ____Date: ____Date: ____Date: ___

Verifying Professional License: PE021682E in PA

J. Christopher Miller 222 North Beaver Street New Castle, PA 16101 724-652-5507 jcm@ecklesgroup.com

Note: When applying for the ENERGY STAR Designed to Earn, the signature of the Verifying Professional must match the stamp.



Verifying Professional Stamp (if applicable)

Recommendation

Based on the findings of our study we recommend that the District consider a comprehensive renovation and modernization of Northwestern Primary Center.

A project of this scope would be eligible for Pennsylvania Department of Education reimbursement through the PlanCon process. The approximate potential reimbursement would be 3 million dollars or about 14% of the project debt service.

We believe the project would be the best value for the District's tax dollars and would provide another great school facility for the District. Continued use of Northwestern provides the District options and future flexibility that Option A does not.



BLACKHAWK SCHOOL DISTRICT DISTRICT WIDE FACILITY STUDY SECTION 6 – OPTIONS CONSIDERED Page 16 of 16





President / Project Manager



CONTACT INFO 724-652-5507 x 1127 dae@ecklesgroup.com

David Esposito provides daily oversight of project teams and the ongoing operations of the firm. As a member of the Eckles team for more than 30 years and a Principal of the firm for more than 20 years, David has participated in design and oversight of numerous and varying architectural projects. Though his designs can be found in many different markets, David's primary focus is architecture for education. David's list of experience includes nearly 20 school buildings as well as athletic fields, running tracks, and district administration offices. In January 2014, David became the newest President of Eckles Architecture and Engineering.

Outside of the office, David serves as a member of the Planning Commission for the city of New Castle, PA. He also actively supports local educational and cultural causes and serves on the board of the Hoyt Center for the Arts in New Castle, PA. In addition, he is an Elder at Clen-Moore Presbyterian Church in New Castle, PA.

EMPLOYEE FACTS

Credentials AIA, NCARB

Education

Carnegie Mellon University, College of Fine Arts Bachelor of Architecture

Registration

PA, License No.: RA008921X OH, License No.: 0112901 WV, License No.: 4360

Professional Affiliations

National Council of Architectural Registration Boards American Institute of Architects Pennsylvania Society of Architects AIA Pittsburgh Council of Educational Facility Planners International



Laurel Highlands High School Laurel Highlands School District Uniontown, PA Additions / Alterations



Southmoreland Elementary/Middle Southmoreland School District Scottdale, PA Additions / Alterations



H. W. Lockley Early Learning Center New Castle Area School District New Castle, PA Additions / Alterations



Burgettstown Area Middle/High Burgettstown Area School District Burgettstown, PA Additions / Alterations



Case Avenue Elementary School Sharon City School District Sharon, PA New Construction



Seneca Valley Senior High School Seneca Valley School District Harmony, PA Additions / Alterations



New Castle Junior/Senior High New Castle Area School District New Castle, PA New Construction



Grove City Area Senior High School Grove City Area School District Grove City, PA Additions / Alterations





Architect / Project Manager



CONTACT INFO 724-652-5507 x 1150 mes@ecklesgroup.com

Mark is a Project Manager and a Registered Architect with over 19 years of professional experience. In his experience with Eckles, he has managed numerous projects, both new construction and addition and renovation, with project size ranging from \$14 million to \$40 million. As a project manager, Mark's responsibilities are diverse and include both design and management roles. Gathering information from the Owner, listening to their needs, and coordinating the information with the architectural design team and outside consultants is crucial to the success of a project. Throughout the design collaboration Mark is able to make design decisions that achieve both aesthetic and functional solutions that meet the Owner's needs and budget.

One of the more interesting projects Mark has completed is Grove City Area Middle School, which has incorporated a geothermal well system to heat and cool the building. Mark has also been the lead designer for two recent award winning school designs- Case Avenue Elementary, one of American School & University's Outstanding Design award winners of 2014, and McIntyre Elementary, the winner of the Armstrong i2r Design Competition 2011 for flooring.

EMPLOYEE FACTS

Credentials RA, NCARB

Education Kent State University, Bachelor of Science Bachelor of Architecture

Registration

PA, License No.: RA403836

<u>Professional Affiliations</u> National Council of Architectural Registration Boards



Laurel Highlands High School Laurel Highlands School District Uniontown, PA Additions / Alterations



Grove City Area Middle School Grove City Area School District Grove City, PA New Construction



Case Avenue Elementary School Sharon City School District Sharon, PA New Construction



McIntyre Elementary School North Hills School District Pittsburgh, PA Additions / Alterations



Frazier Elementary/Middle School Frazier School District Perryopolis, PA New Construction



Highcliff Elementary School North Hills School District Pittsburgh, PA Additions / Alterations



Southmoreland Elementary/Middle Southmoreland School District Scottdale, PA Additions / Alterations



Seneca Valley Senior High School Seneca Valley School District Harmony, PA Additions / Alterations



J. CHRISTOPHER MILLER

Director of Engineering



CONTACT INFO 724-652-5507 x 2101 jcm@ecklesgroup.com

Chris Miller has over 40 years of experience as an engineer, working most of those years with Eckles as a consultant, and eight years as Eckles Engineering Director. With a background in mechanical engineering, Chris is LEED certified AP+BD&C. At Eckles, Chris is also the lead HVAC designer for the firm. Chris's responsibilities include energy analysis, examining current systems to determine viability and reusability while conserving owner dollars, and reviewing code requirements.

A few of Chris's notable projects include the design of the mechanical systems for the newly completed Case Avenue Elementary School, Harry W. Lockley Early Learning Center, Laurel Highlands High School, and Frazier Elementary / Middle School projects. Chris uses a multitude of advanced calculation, modeling and energy analysis tools to identify the most efficient use of energy and equipment.

EMPLOYEE FACTS

Credentials

PE LEED AP with BD&C

Education

Rensselaer Polytechnic Institute Bachelor of Science in Mechanical Engineering

Registration

PA, License No: PE021682E OH, License No: 49537 WV, License No: 014742

Professional Affiliations

- American Society of Heating, Refrigerating & Air Conditioning Engineers
- National Society of Professional Engineers
- Pennsylvania Society of Professional Engineers
- Pennsylvania Engineers in Private Practice

National Fire Protection Association



Laurel Highlands High School Laurel Highlands School District Uniontown, PA Additions / Alterations



Grove City Area Middle School Grove City Area School District Grove City, PA New Construction



Moon Area Middle School Moon Area School District Moon Township, PA Additions / Alterations



Southmoreland Elementary/Middle Southmoreland School District Scottdale, PA Additions / Alterations



H.W. Lockley Early Learning Center New Castle Area School District New Castle, PA Additions / Alterations



Case Avenue Elementary School Sharon City School District Sharon, PA New Construction



Moon Area High School Moon Area School District Moon Township, PA Additions / Alterations



Cranberry Area Elementary School Cranberry Area School District Seneca, PA Additions / Alterations







CONTACT INFO 724-652-5507 x 2143 tjb@ecklesgroup.com

Tim draws on more than 30 years of electrical design experience to serve as the lead electrical designer for Eckles. Tim specializes in all areas of electrical design including: power distribution, lighting, security systems, sound systems, paging systems, and fire alarms. Having earned a degree in physics, Tim was previously an outside consultant for Eckles Architecture while working with James S. Young & Associates. Working for James S. Young & Associates, Tim completed projects in the industrial and healthcare sectors.

Tim works closely with each engineering disciplines as well as architectural designers and equipment vendors to ensure the most effective and efficient use of electrical power within an aesthetically pleasing architectural design.

EMPLOYEE FACTS

Credentials EIT

Education

Slippery Rock University of Pennsylvania College of Applied Science Bachelor of Science in Physics

Registration

EIT State of Pennsylvania Green Globe Professional



H.W. Lockley Early Learning Center New Castle Area School District New Castle, PA Additions / Alterations



Neshannock Elementary School Neshannock Township School District New Castle, PA Additions / Alterations



Case Avenue Elementary School Sharon City School District Sharon, PA New Construction



Burgettstown Area Middle/High Burgettstown Area School District Burgettstown, PA Additions / Alterations



New Castle Junior/Senior High New Castle Area School District New Castle, PA New Construction



Edgeworth Elementary School Quaker Valley School District Sewickley, PA Additions / Alterations



Indiana Area Junior High School Indiana Area School District Indiana, PA Additions / Alterations



Osborne Elementary School Quaker Valley School District Sewickley, PA Additions / Alterations