# BEDFORD AREA SCHOOL DISTRICT

BEDFORD, PA

DISTRICT-WIDE FEASIBILITY STUDY

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# FEASIBILITY STUDY INTRODUCTION

This Feasibility Study, completed by EI Associates, as commissioned by the Board of School Directors, is intended as a tool in evaluating the Bedford Area School District's current and future facility needs and expenditures.

The Commonwealth of Pennsylvania requires that School Districts complete a Feasibility Study of all facilities owned by the School District as part of receiving State reimbursement for a PlanCon project. The study must provide an appraisal of the ability of existing schools to meet current and planned educational programs and space needs including an analysis of projected enrollment. The District-wide feasibility study requirements are outlined on the following pages.

This study has been compiled using data gathered at recent meetings with District Administrators. Visits to the buildings have been conducted to evaluate their compliance with Department of Education Standards; International Building Codes; Pennsylvania Department of Labor and Industry Standards; National Plumbing and Electrical Codes; and the American Disability Act Accessibility Standards. The Feasibility Study began with a tour of each existing building to evaluate its size, age, condition, suitability as an educational facility and potential for upgrading or expansion. Discussions took place with the School District, following the building tours, to confirm current and projected building usage and school programs, also to explore possible future changes in program and developments that might affect the study.

The following topics are covered within the study:

- An overview of the Bedford Area School District that considers such factors as geography, population, and wealth. Distinguishing characteristics that will have an impact on Bedford Area School District's facilities are identified such as geographically separate population centers.
- An analysis of Bedford Area School District's projected enrollment, including population projection charts 10 years into the future for grade groupings K-5; 6-8, 9-12; and K-12.
- An overview of Bedford Area School District's educational program that highlights special facility needs, including curriculums that would require special design features.
- An analysis of each building's capacity as it relates to the educational program.
- Existing educational trends, future technologies, and future learning strategies/activities are considered as part of this evaluation as criteria to judge a facility and to determine its long-range usefulness as a school.
- An analysis of each building's physical condition includes the following: Current building codes, PA Department of Education Standards, energy conservation measures, and the America Disability Act Accessibility Standards (ADA). The analysis is divided into at least seven major facility components: Site; Exterior of Building; Interior of Building; Heating, Ventilation, and Air Conditioning; Plumbing; Electrical; and Code Evaluation; as well as applicable components including Security, IT and Communications, and Educational Upgrades.
- An analysis of construction options, including cost estimates, and a summary depicting buildings, options, and costs.

# FEASIBILITY STUDY GUIDELINES

## Pennsylvania Department of Education: District-Wide Facility Study Guidelines

"District-Wide Facility Study Guidelines", which are based on the Pennsylvania Department of Education (PDE) PlanCon-A instructions, are outlined below.

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 Justification, 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 A03, 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 prerequisite 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.

# FEASIBILITY STUDY GUIDELINES

## Pennsylvania Department of Education: District-Wide Facility Study Guidelines (con't)

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

1. An overview of the school district that considers such factors as geography, population, and 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.

2. An overview of the school district's educational program. The overview must address for all grades (K-12):
   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.

4. 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
   c. grade alignments
   d. length of 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.

# FEASIBILITY STUDY GUIDELINES

## Pennsylvania Department of Education: District-Wide Facility Study Guidelines (con't)

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 depiction options and costs
   e. Energy Portfolio Surveys

7. 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 existing 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.

   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.

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

   This Survey entails providing a predictive 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.

# DISTRICT OVERVIEW INTRODUCTION

This section of the Feasibility Study is an overview of the Bedford Area School District that considers such factors as geography, population, and wealth. Distinguishing characteristics that will have an impact on Bedford Area School District's facilities are identified such as geographically separate population centers.

The topics covered in this section of the Feasibility Study include:

- A summary of School District Buildings.
- Geography / Geographic Population Centers including data and respective maps.
- Population / Population Density / Population Distribution by Land Use including data and respective maps.
- Housing Characteristics including Total Housing Units as well as Occupied Housing Units, Vacant Housing Units, and Persons Per Household.
- Economic Characteristics including Income and Occupation data.
- General Population Characteristics.

# DISTRICT OVERVIEW

## School District Buildings

The Elementary School program consists of grades K-5 located in Bedford Elementary School.

The Secondary School program consists of grades 6-8 located in Bedford Middle School and grades 9-12 located in Bedford High School.

The District Administration Offices are located in Bedford High School.

**Table 1** profiles the School District Buildings. Refer to Map 1 for a geographic illustration of the School District.

| **TABLE 1<br>Bedford Area SD<br>Buildings** | Grade Levels | 2013-14 Student Enrollment | Site Size Acres | Construction / Renovation Dates |
|---|---|---|---|---|
| Bedford Elementary | K-5 | 783 | 21 | 1996 |
| Bedford Middle School | 6-8 | 488 | 30* | 1978 |
| Bedford High School with District Administration Offices | 9-12 | 632 | 30* | 1888; 1927 A; 1934 A; 1946 A; 1954 A; 1996 A |

* shared site

## School Board of Directors

The Board of School Directors is made up of nine members. The nine directors are elected from the District's residents as a whole. Elections are held in alternate years in accordance with law. Director's terms last four years. The Superintendent is the chief administrative officer of the School District, with overall responsibility for all aspects of operations, including education, finance and facility planning. The Business Administrator is responsible for budget and financial operations. Both of these officials are selected by the Board of School Directors.

# DISTRICT OVERVIEW

## Bedford Area School District - District Map

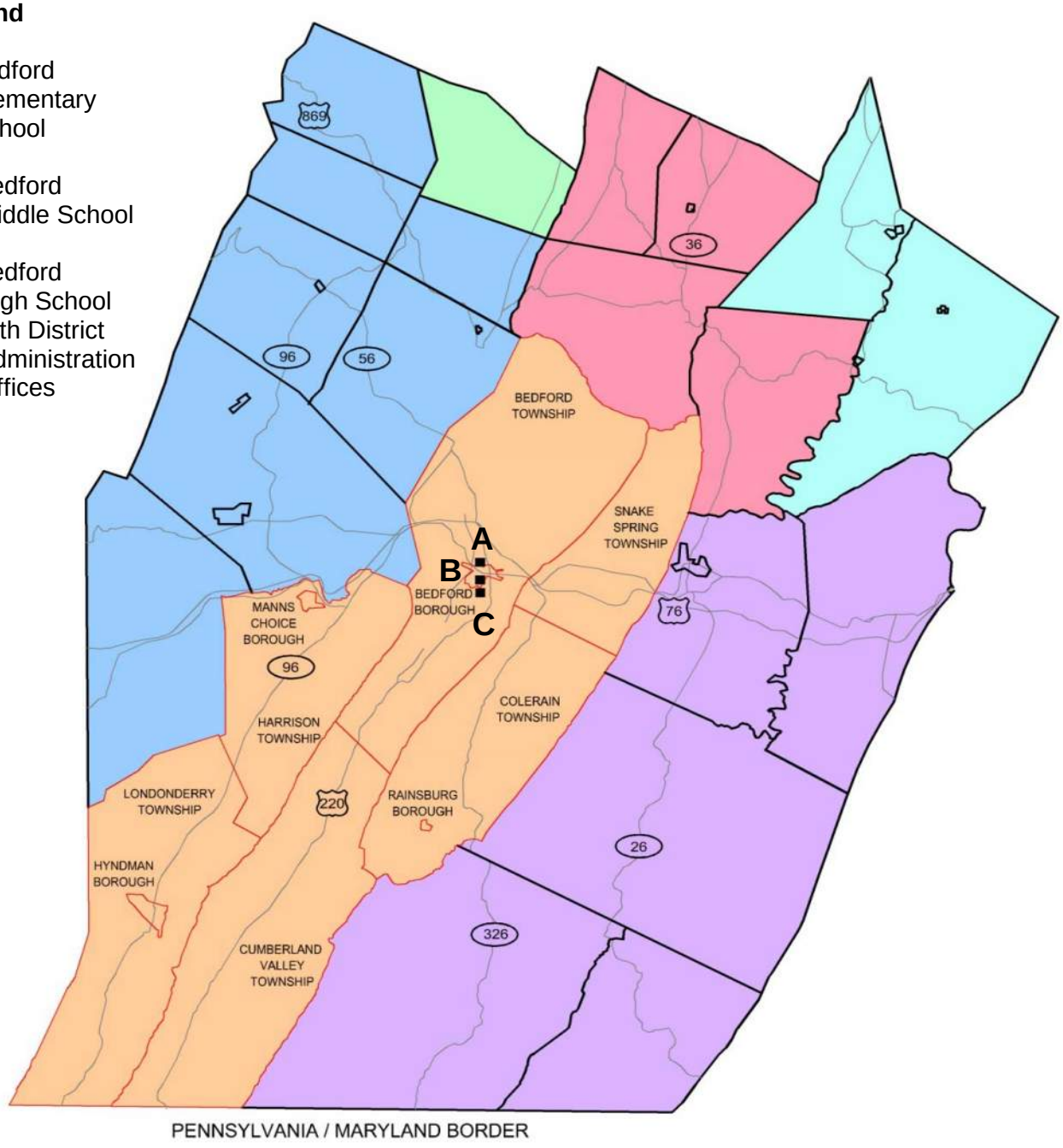
**Map 1** illustrates the Bedford Area School District. Map source is the Bedford County Comprehensive Plan.

**Legend**

**A** Bedford Elementary School

**B** Bedford Middle School

**C** Bedford High School with District Administration Offices



# DISTRICT OVERVIEW

## Geography / Geographic Population Centers

The Bedford Area School District is located in the Central and Southwestern sections of Bedford County, Pennsylvania. The School District stretches South to the Pennsylvania-Maryland border. Refer to Maps 1 and 2 for geographic illustrations.

The Bedford Area School District includes the municipalities of Bedford Borough, Bedford Township, Colerain Township, Cumberland Valley Township, Harrison Township, Hyndman Borough, Londonderry Township, Manns Choice Borough, Rainsburg Borough, and Snake Spring Township.

The School District is bounded on the North by South Woodbury Township; on the South by the Pennsylvania-Maryland border; on the East by Hopewell Township, West Providence Township, Monroe Township, and Southampton Township; and on the West by East St. Clair Township, Napier Township and Juniata Township. The Buffalo Mountain ridge runs in a North-South direction bisecting the School District between Londonerry Township and Cumberland Valley Township.

Several main arteries traverse the School District including Interstate Route 76 (the Pennsylvania Turnpike) and Interstate Route 70 traveling in East-West directions; Interstate Route 99 / U.S. Route 220 (Bedford Valley Road) traveling in a North-South direction; U.S. Route 30 (Lincoln Highway); PA Route 56; PA Route 96 ( Hyndman Road); and PA Route 326.

The School District presently operates one K-5 Elementary School, one 6-8 Middle School, and one 9-12 High School Facility with District Administration Offices. The K-5 attendance area attends the Elementary School, the 6-8 attendance area attends the Middle School and the 9-12 attendance area attends the High School.

# DISTRICT OVERVIEW

## Population / Population Density / Population Distribution by Land Use

The population age percentages based on the 2010 U.S. Census for the School District are as follows: 5% of residents are Pre-school age children 0 to 4 years; 15% of residents are School age children 5 to 17 years; 58% of residents are Adults age 18 to 64 years; and 23% of residents are Adults age 65+ years.

The School District serves an approximate population of 16,838 residents within 292.46 square miles, and is primarily a rural agricultural area. The approximate average Population Density of the School District is 58 persons per square mile, while the Household Average Density is 27 households per square mile.

The majority of the School District's population lives in Rural Non-Farm areas. The School District is approximately 73.0% Rural, with 70.2% of the population classified as Rural Non-Farm, and 2.8% of the population classified as Rural Farm. The remaining 27% of the School District's population is classified as Urban.

U.S. Census profiles for the Population of each Municipality that comprise the School District illustrate: a net increase from 2000 to 2010 in Adults age 65+ years; and a net decrease in the Total Population as well as Pre-school age children 0-4 years, School age children 5-17 years, and Adults age 18-64 years. The 2010 Census Data indicates the Median Age is 46.4, illustrating a net increase in the Median Age since 2000.

## Housing Characteristics

U.S. Census profiles for the Housing Data of each Municipality comprising the School District illustrate: a net increase in the Renter Occupied Units and Vacant Housing Units; and a net decrease in Total Housing Units as well as Occupied Housing Units, and Owner Occupied Units from 2000 to 2010. The 2010 Census Data indicates 2.48 Persons Per Household, illustrating a net increase in Persons Per Household.

The Years that Housing Structures (all occupied and unoccupied units) were built in the School District are as follows: 28.2% were built 1939 or Earlier; 18.2% were built between 1940 to 1959; 26.0% were built between 1960 to 1979; 21.2% were built between 1980 to 1999; 4.5% were built between 2000 to 2004; and 2.1% were built 2005 or later.

The Years that the Householder moved into the Housing Unit (total occupied housing units) in the School District are as follows: 10.4% in 1969 or Earlier; 11.7% between 1970 to 1979; 13.9% between 1980 to 1989; 20.4% between 1990 to 1999; 21.2% between 2000 to 2004; 22.3% in 2005 or later.

# DISTRICT OVERVIEW

## Economic Characteristics

Economic data based on the 2010 U.S. Census for the School District: $37,478 was the Median Household Income; $47,708 was the Mean Household Income; $20,867 was the Per Capita Income; and $122,100 was the Median House Value.

The Occupation data of employed civilian population age 16 years and over for the School District: 24.2% Management & Professional; 20.7% Service Occupations; 21.9% Sales & Office; 11.1% Natural Resources, Construction, and Maintenance Occupations; and 22.1% Production, Transportation & Material Moving.

## General Population Characteristics

Total population of the School District: 49.3% Male and 50.7% Female.

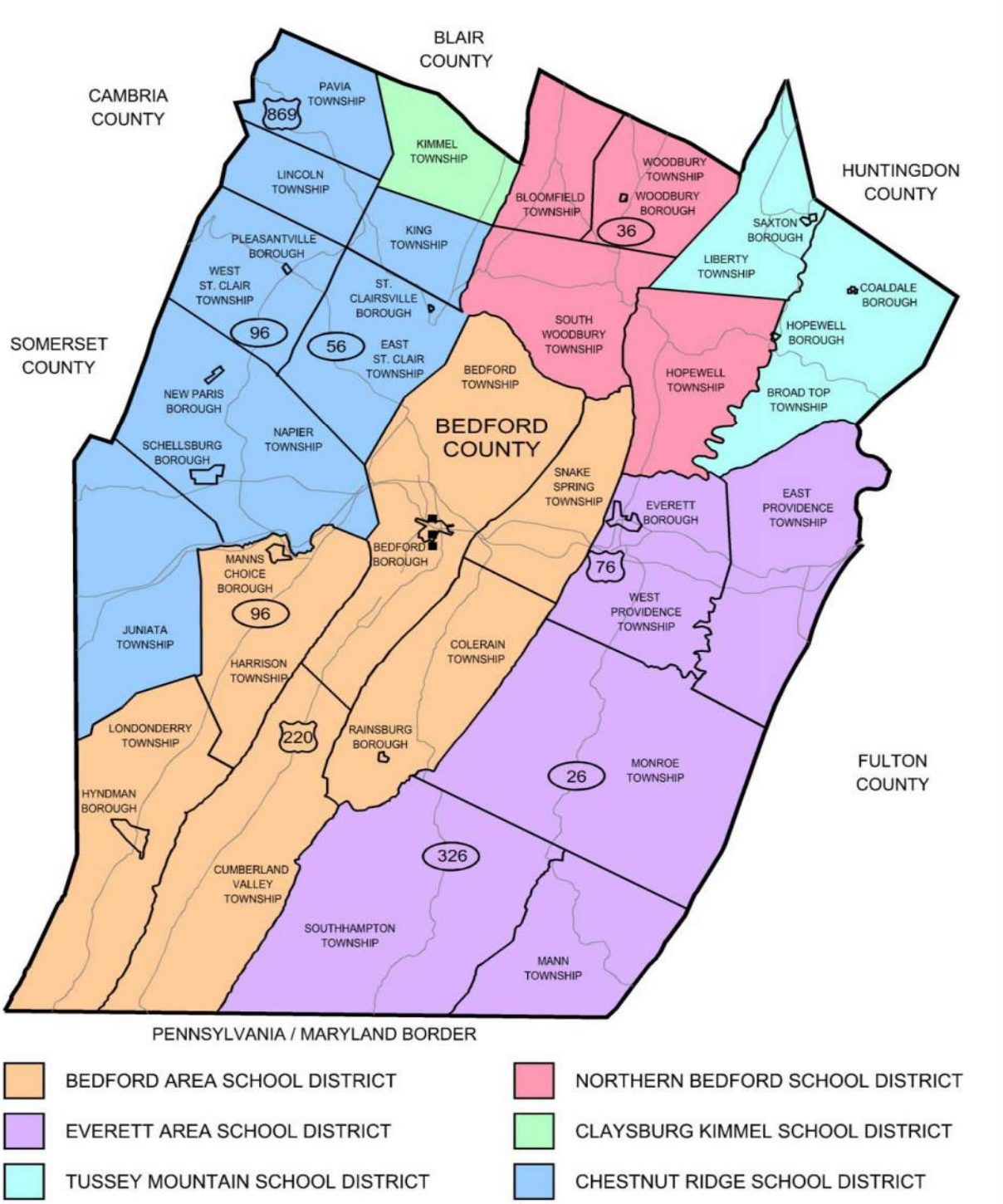
Total Population over 16 years of age: 55.3% are in the Labor Force; 50.7% commute to work; Mean travel time to work is 24.9 minutes.

The racial makeup of the School District in 2010 was 97.2% White, 0.8% African American, 0.2% Native American, 0.4% Asian, 0.1% Pacific Islander, 0.6% Other Races, and 0.8% from two or more races. Hispanic or Latino of any race were 1.2% of the population.

# DISTRICT OVERVIEW

## Bedford County School Districts - County Map

**Map 2** illustrates the School Districts located in Bedford County. Map source is the Bedford County Comprehensive Plan.



# DISTRICT OVERVIEW

## Population

The School District Population age percentages based on the 2010 U.S. Census: 5% of residents are Pre-school age children 0 to 4 years; 15% of residents are School age children 5 to 17 years; 58% of residents are Adults age 18 to 64 years; and 23% of residents are Adults age 65+ years.

**Table 2** profiles the School District population and percentages by age groupings. The Data is based on the 2010 U.S. Census.

| **TABLE 2 Population** | Number of Residents | Percentage of Residents |
|---|---|---|
| Pre-school children 0 to 4 years | 775 | 5% |
| School age children 5 to 17 years | 2,521 | 15% |
| Adults 18 to 64 years | 9,737 | 58% |
| Adults 65+ years | 3,805 | 23% |
| **School District Total** | **16,838** | **100%** |

## Population Density

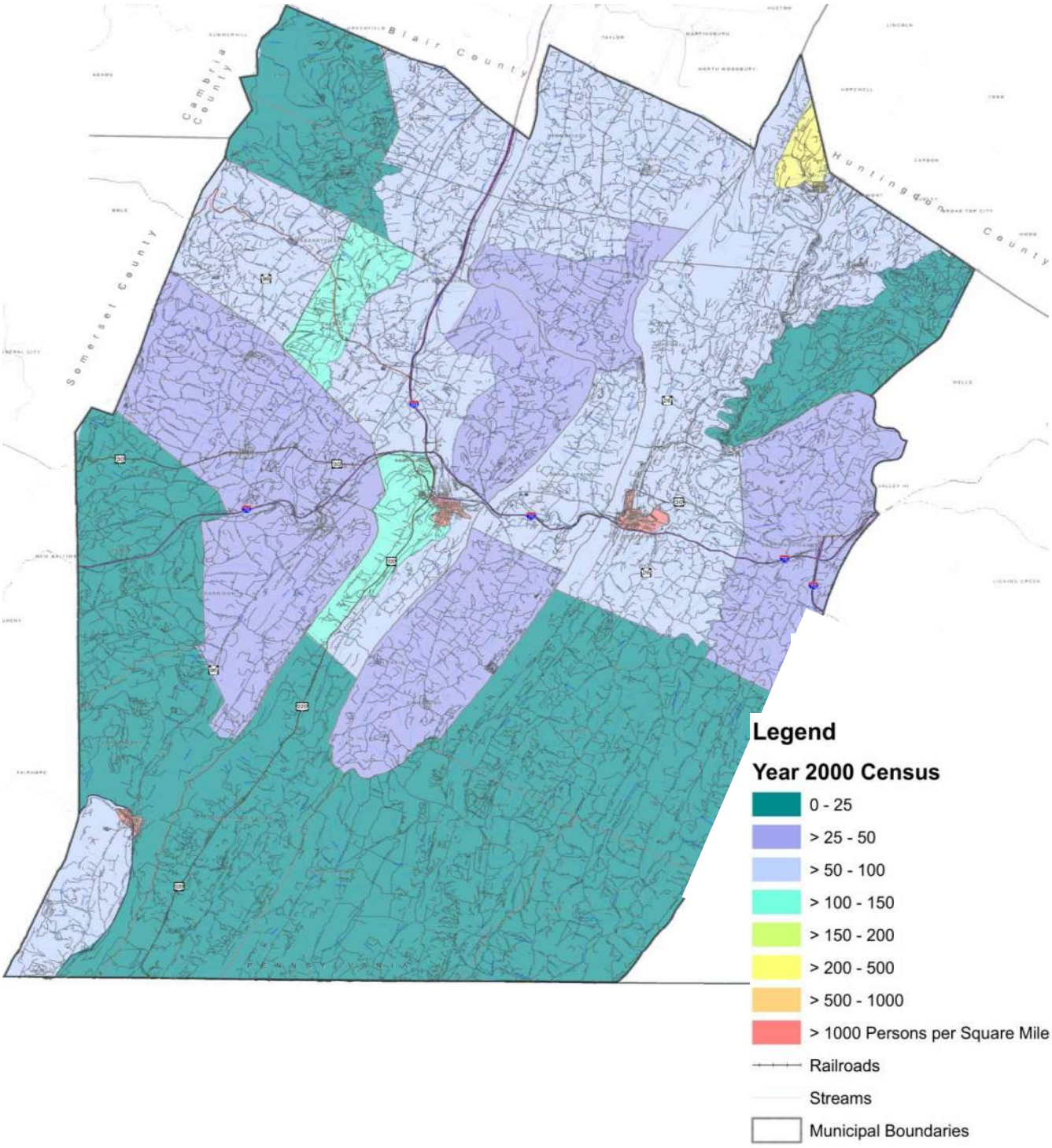
The School District serves an approximate population of 16,838 residents within 292.46 square miles, and is primarily a rural agricultural area. The approximate average Population Density of the School District is 58 persons per square mile, while the Household Average Density is 27 households per square mile.

**Table 3** profiles the population density of each municipality**.** The Data is based on the 2010 U.S. Census. Refer to Map 3 for a graphic illustration of the Bedford County Population Density.

| **TABLE 3 Population Density** | Total Area sq. mi. | Number of Residents | Number of Households | No. of Housing Units | Population Density per sq. mi. | Household Avg. Density per sq. mi. |
|---|---|---|---|---|---|---|
| Bedford Borough | 1.07 | 2,841 | 1,417 | 1,518 | 2,657.6 | 1,325.5 |
| Bedford Township | 68.60 | 5,395 | 2,117 | 2,357 | 78.6 | 30.9 |
| Colerain Township | 42.60 | 1,195 | 440 | 494 | 28.1 | 10.3 |
| Cumberland Valley Twp | 60.50 | 1,597 | 558 | 743 | 26.4 | 9.2 |
| Harrison Township | 38.00 | 972 | 330 | 582 | 25.6 | 8.7 |
| Hyndman Borough | 0.70 | 910 | 442 | 492 | 1,309.4 | 636.0 |
| Londonderry Twp | 54.40 | 1,856 | 723 | 827 | 34.1 | 13.3 |
| Manns Choice Borough | 0.54 | 300 | 104 | 110 | 560.7 | 194.4 |
| Rainsburg Borough | 0.16 | 133 | 40 | 59 | 841.8 | 253.2 |
| Snake Spring Twp | 25.90 | 1,639 | 660 | 742 | 63.3 | 25.5 |
| **School District Total** | **292.46** | **16,838** | **6,831** | **7,924** | **58** | **27** |

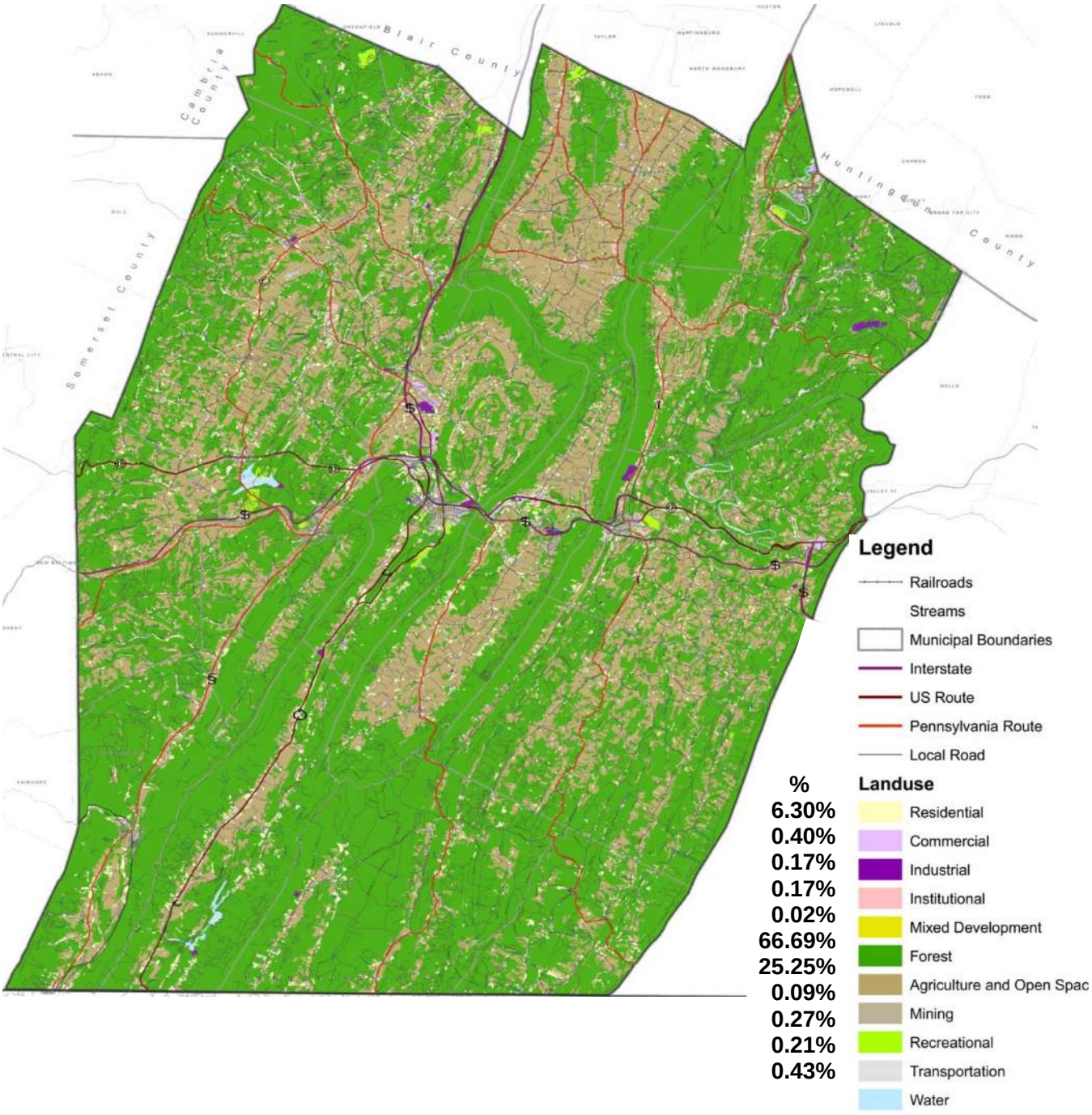
## Bedford County Population Density - County Map

**Map 3** illustrates the Bedford County Population per square mile. Map source is the Bedford County Comprehensive Plan.



## Bedford County Existing Land Use - County Map

**Map 4** illustrates the Existing Land Use in Bedford County. Map and information source is the Bedford County Comprehensive Plan. Bedford County is approximately 1071.07 square miles in area or 685,482.85 acres in size of which only 7.26% was developed in 2000. The land use categories and approximate percentages of Bedford County's total land area are listed below.



# DEMOGRAPHIC EXPLORATION INTRODUCTION

This section of the Feasibility Study is divided into two parts. Part A explores demographic data for the *General Population and the resulting effects on the Student Population* of the Bedford Area School District including: Population Information; Household Information; Housing Unit Developments; and Live Birth Data. Part B explores demographic data that focuses on the *Student Population* of the School District including: Projected Student Enrollment Data; Building Capacity Data; Student Enrollment vs. Building Capacity Data; as well as Educational Program Information.

Demographic projections are the basis for making decisions concerning the establishment of facilities, both existing and new. Recognizing that the intent of a School District's physical plan is to house students for the purpose of education, appropriate criteria must be used to determine those projections. Student enrollment projections for this study were supplied by the Department of Education, the School District, and EI Associates. This data also was used to generate future building requirements.

The Projected Student Enrollment Tables show the student enrollment projections by grade level, by grade grouping, and by year. Future student enrollment has been computed from known live births and interpolated, where necessary, using the cohort survival methodology. The cohort survival method has a record of reliability in relatively stable districts (what has occurred in the past will, to a large extent, continue to occur). However, changes can occur in birth trends, in-migration patterns, internal policies, economic climate, zoning and land use controls, infrastructure considerations, and interest rates that may affect projections. Thus, influencing factors must be monitored and analyzed every year by the School District. Significant changes, therefore, can be quickly identified and appropriate adjustments made.

It is not only the number of students that affects the capability of adequate facilities. The educational program also must be analyzed. Other factors that may affect the ability of the existing facilities to meet the needs of the educational program are:

1. Full-day Kindergarten and Pre-Kindergarten program
2. Grade groupings to remain
3. Future trends in special education
4. Trends in technology-based education
5. Desired classroom size as noted in study

# DEMOGRAPHIC EXPLORATION SUMMARY PART A

## General and Student Population

### Population

Data based on the 2000 and 2010 U.S. Census illustrates a net increase in Adults ages 65+ years from 2000 to 2010 as well as the median age. The data illustrates a net decrease in the Total Population as well as Pre-school age children 0-4 years, School age children 5-17 years, and Adults age 18-64 years.

### Households

Data based on the 2000 and 2010 U.S. Census illustrates a net increase in the Renter Occupied Units, Vacant Housing Units and Persons Per Household; a net decrease in Total Housing Units as well as Occupied Housing Units, and Owner Occupied Units.

### Housing Unit Developments

There is the potential availability of land for development within the School District. Available Data for Housing Unit Developments collected from the municipalities and other sources illustrates a modest amount of planned development within the School District.

### Live Birth Data

The Live Birth Data, based on information from the Pennsylvania Department of Education, illustrates a net decrease in the number of children entering Kindergarten and First Grade compared to the number of Births.

### Students not included in Enrollment Projections

Each year there are a number of students who are not attending District Schools. Some of these students attend private schools; some students are special needs and special education students placed outside the District; some students are Residentail Facility/Treatment students; some are home schooled students; and some are Charter / Cyber School students.

### Student Population attending District Schools

The student population attending District Schools had increased during the 1990's. The K-12 student enrollment had increased during mid 2000's as well. Since the mid 2000's the K-12 student enrollment has decreased.

Current student enrollment projections indicate that the 10-year K-12 Student Enrollment may continue to decrease based upon current projections through the 2021-22 school-year.

## General and Student Population

### Students per Household - 2000

In 2000, there were 2,703 School age children residing in the School District with 2,357 children or 87% attending the Bedford Area School District and 346 children or 13% not attending the District Schools.

In 2000, the percentage of School age children per Total Housing Units was 0.34, while the percentage of Students per Total Housing Units attending the Bedford Area School District was 0.30.

### Students per Household - 2010

2010: 2,521 School age children resided in the School District: 2240 Students or 89% attended the School District and 281 School-age children or 11% did not attend District Schools.

The percentage of Students per Total Housing Units was 0.32 in 2010; the percentage of Students attending the School District for the 2010-11 School year was 0.28.

### Data Summary

There was in increase in both the Total Population and Total Housing Units from 1990 to 2000; however since 2000 to 2010 there has been a slight decrease in both the Total Population and Total Housing Units. The number of Persons per Household and Students per Household has decreased and the number of Students per Household attending the School District has decreased. The population shows an increase in residents of adults ages 18-64 years from 1990 to 2000 and Adults ages 65+ years from 2000 to 2010, indicating that the District is experiencing an aging population.

There is a modest potential for population growth within the School District by both new Housing Unit Developments and the current vacant housing units.

The percentage of School age Students residing in the District that were not attending District Schools has decreased from 13% in 2000 to 11% in 2010. There is a potential for any portion of the 11% of School age Students residing in the District who are not currently attending District Schools to attend the District Schools in the future.

## Population Information

**Tables 4-6 profile the Population of each Municipality that comprise the Bedford Area School District. The Data is based on the U.S. Census. The Tables illustrate a net increase in Adults ages 65+ years. The Tables illustrate a net decrease in the Total Population as well as Pre-school age children 0-4 years, School age children 5-17 years, and Adults age 18-64 years. The 2010 Census data indicates that the median age is 46.4.**

**Table 4** profiles data from the 2000 Census and **Table 5** profiles data from the 2010 Census. The Tables profile Total Population as well as various age groupings including: Pre-school age children 0-4 years; School age children 5-17 years; Adults age 18-64 years; and Adults age 65+ years.

| **TABLE 4 2000 U.S. Census** | Total Population | Age 0-4 Yrs. | Age 5-17 Yrs. | Age 18-64 Yrs. | Age 65+ Yrs. | Median Age |
|---|---|---|---|---|---|---|
| Bedford Borough | 3,141 | 155 | 437 | 1,834 | 715 | |
| Bedford Township | 5,417 | 288 | 865 | 3,183 | 1,081 | |
| Colerain Township | 1,147 | 62 | 192 | 707 | 186 | |
| Cumberland Valley Twp | 1,494 | 70 | 275 | 906 | 243 | |
| Harrison Township | 1,007 | 61 | 181 | 569 | 196 | |
| Hyndman Borough | 1,005 | 65 | 178 | 547 | 215 | |
| Londonderry Twp | 1,760 | 112 | 284 | 1,076 | 288 | |
| Manns Choice Borough | 291 | 18 | 64 | 170 | 39 | |
| Rainsburg Borough | 146 | 4 | 23 | 73 | 46 | |
| Snake Spring Twp | 1,482 | 76 | 204 | 852 | 350 | |
| **School District Total** | **16,890** | **911** | **2,703** | **9,917** | **3,359** | **42.4** |
| **School Dist. % Total** | **100%** | **5%** | **16%** | **59%** | **20%** | |

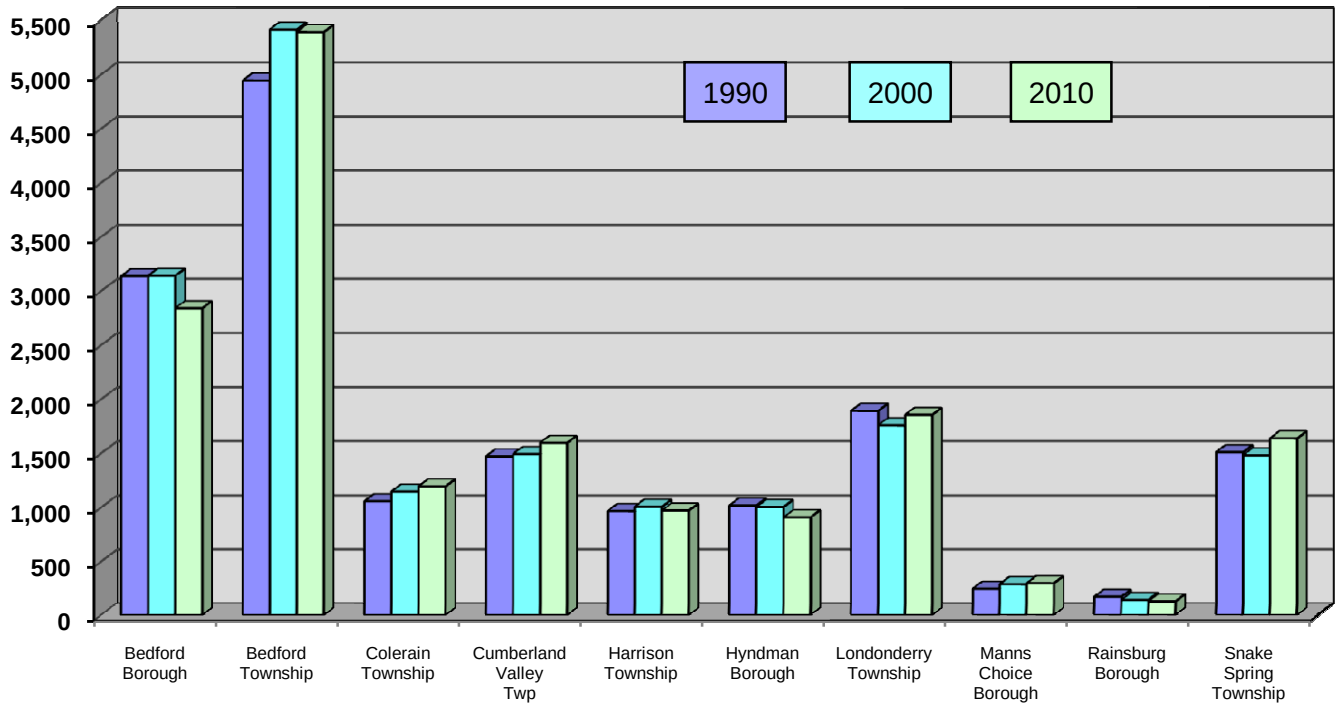
| **TABLE 5 2010 U.S. Census** | Total Population | Age 0-4 Yrs. | Age 5-17 Yrs. | Age 18-64 Yrs. | Age 65+ Yrs. | Median Age |
|---|---|---|---|---|---|---|
| Bedford Borough | 2,841 | 130 | 359 | 1,635 | 717 | |
| Bedford Township | 5,395 | 200 | 766 | 3,145 | 1,284 | |
| Colerain Township | 1,195 | 72 | 195 | 693 | 235 | |
| Cumberland Valley Twp | 1,597 | 87 | 278 | 925 | 307 | |
| Harrison Township | 972 | 50 | 167 | 559 | 196 | |
| Hyndman Borough | 910 | 46 | 151 | 509 | 204 | |
| Londonderry Twp | 1,856 | 82 | 325 | 1,097 | 352 | |
| Manns Choice Borough | 300 | 18 | 48 | 197 | 37 | |
| Rainsburg Borough | 133 | 7 | 19 | 82 | 25 | |
| Snake Spring Twp | 1,639 | 83 | 213 | 895 | 448 | |
| **School District Total** | **16,838** | **775** | **2,521** | **9,737** | **3,805** | **46.4** |
| **School Dist. % Total** | **100%** | **5%** | **15%** | **58%** | **23%** | |

## Population Information

**Table 6** profiles the Total population of each municipality for the Census years 1990 and 2000 as well as 2010. (Data Source: U.S. Census) **The overall Total Population shows an increase of 463 persons or 2.8% from 1990 to 2000; and a projected decrease of 52 persons or 0.3% from 2000 to 2010.**

| TABLE 6 Total Population | 1990 Actual Total Popul. | 2000 Actual Total Popul. | Value Change 1990 to 2000 | % Change 1990 to 2000 | 2010 Actual Total Popul. | Value Change 2000 to 2010 | % Change 2000 to 2010 |
|---|---|---|---|---|---|---|---|
| Bedford Borough | 3,137 | 3,141 | 4 | 0.1% | 2,841 | -300 | -9.6% |
| Bedford Township | 4,945 | 5,417 | 472 | 9.5% | 5,395 | -22 | -0.4% |
| Colerain Township | 1,058 | 1,147 | 89 | 8.4% | 1,195 | 48 | 4.2% |
| Cumberland Valley Twp | 1,473 | 1,494 | 21 | 1.4% | 1,597 | 103 | 6.9% |
| Harrison Township | 967 | 1,007 | 40 | 4.1% | 972 | -35 | -3.5% |
| Hyndman Borough | 1,019 | 1,005 | -14 | -1.4% | 910 | -95 | -9.5% |
| Londonderry Twp | 1,893 | 1,760 | -133 | -7.0% | 1,856 | 96 | 5.5% |
| Manns Choice Borough | 249 | 291 | 42 | 16.9% | 300 | 9 | 3.1% |
| Rainsburg Borough | 175 | 146 | -29 | -16.6% | 133 | -13 | -8.9% |
| Snake Spring Twp | 1,511 | 1,482 | -29 | -1.9% | 1,639 | 157 | 10.6% |
| **School Dist.Total** | **16,427** | **16,890** | **463** | **2.8%** | **16,838** | **-52** | **-0.3%** |

**TABLE 6 - CHART A**



## Household Information

**Tables 7-9 profile the Household data of each Municipality that comprise the Bedford Area School District. The Data is based on the U.S. Census. The Tables illustrate a net increase in the Renter Occupied Units, Vacant Housing Units and Persons Per Household. The Tables illustrate a net decrease in Total Housing Units as well as Occupied Housing Units, and Owner Occupied Units.**

**Table 7** profiles data from the 2000 Census and **Table 8** profiles data from the 2010 Census. The Tables profile the Total Housing Units and Occupied Housing Units, as well as Owner Occupied Units, Renter Occupied Units, Vacant Housing Units and Persons Per Household.

| **TABLE 7 Housing Units 2000 U.S. Census** | Total Housing Units | Occupied Housing Units | Owner Occupied Units | Renter Occupied Units | Vacant Housing Units | Persons Per Household |
|---|---|---|---|---|---|---|
| Bedford Borough | 1,640 | 1,536 | 798 | 738 | 104 | |
| Bedford Township | 2,403 | 2,144 | 1,781 | 363 | 259 | |
| Colerain Township | 483 | 435 | 372 | 63 | 48 | |
| Cumberland Valley Twp | 710 | 596 | 520 | 76 | 114 | |
| Harrison Township | 600 | 385 | 325 | 60 | 215 | |
| Hyndman Borough | 448 | 413 | 328 | 85 | 35 | |
| Londonderry Twp | 799 | 685 | 585 | 100 | 114 | |
| Manns Choice Borough | 124 | 116 | 92 | 24 | 8 | |
| Rainsburg Borough | 66 | 57 | 45 | 12 | 9 | |
| Snake Spring Twp | 652 | 552 | 493 | 59 | 100 | |
| **School District Total** | **7,925** | **6,919** | **5,339** | **1,580** | **1,006** | **2.44** |

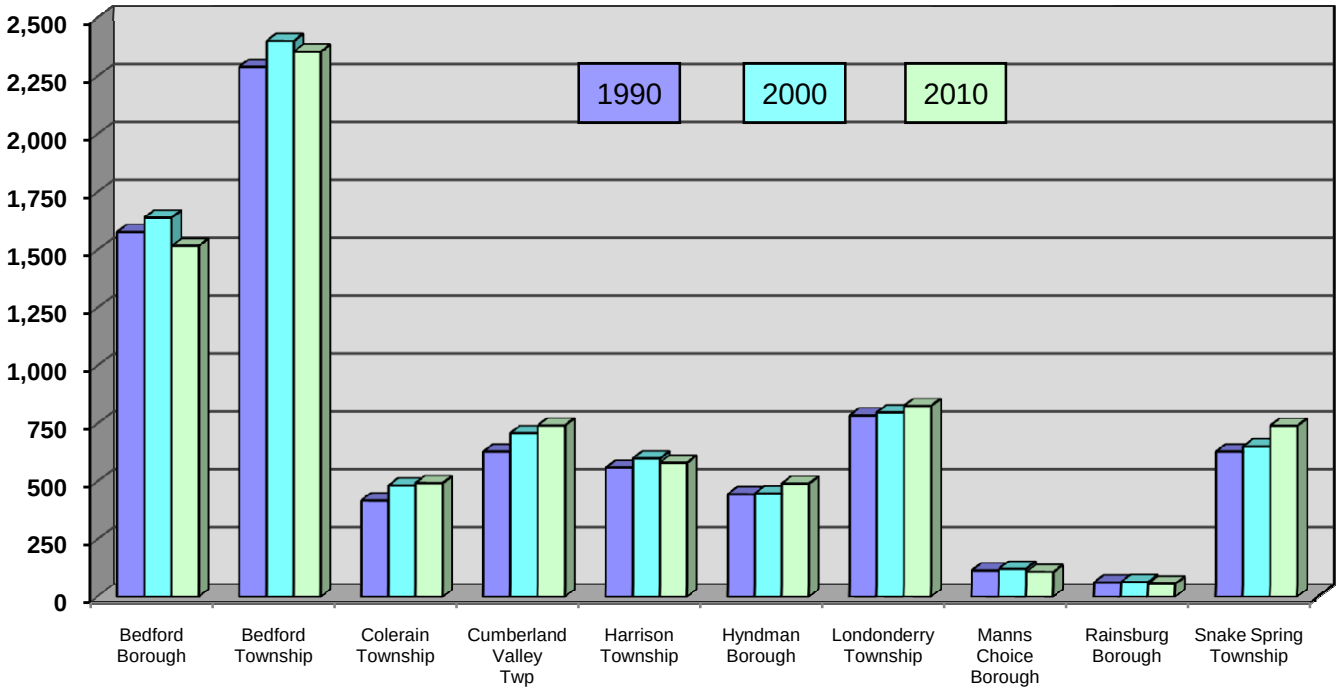
| **TABLE 8 Housing Units 2010 U.S. Census** | Total Housing Units | Occupied Housing Units | Owner Occupied Units | Renter Occupied Units | Vacant Housing Units | Persons Per Household |
|---|---|---|---|---|---|---|
| Bedford Borough | 1,518 | 1,417 | 671 | 746 | 101 | |
| Bedford Township | 2,357 | 2,117 | 1,728 | 389 | 240 | |
| Colerain Township | 494 | 440 | 386 | 54 | 54 | |
| Cumberland Valley Twp | 743 | 558 | 499 | 59 | 185 | |
| Harrison Township | 582 | 330 | 272 | 58 | 252 | |
| Hyndman Borough | 492 | 442 | 304 | 138 | 50 | |
| Londonderry Twp | 827 | 723 | 614 | 109 | 104 | |
| Manns Choice Borough | 110 | 104 | 71 | 33 | 6 | |
| Rainsburg Borough | 59 | 40 | 35 | 5 | 19 | |
| Snake Spring Twp | 742 | 660 | 556 | 104 | 82 | |
| **School District Total** | **7,924** | **6,831** | **5,136** | **1,695** | **1,093** | **2.48** |

## Household Information

**Table 9** profiles the Total Housing Units of each municipality for the Census years 1990 and 2000 as well as 2010. **The overall Total Housing Units shows an increase of 403 units or 5.36% from 1990 to 2000; and a decrease of 1 unit or -0.01% from 2000 to 2010.**

| TABLE 9<br>Total Housing Units | 1990 Total Housing Units | 2000 Total Housing Units | Value Change 1990 to 2000 | % Change 1990 to 2000 | 2010 Total Housing Units | Value Change 2000 to 2010 | % Change 2000 to 2010 |
|---|---|---|---|---|---|---|---|
| Bedford Borough | 1,579 | 1,640 | 61 | 3.86% | 1,518 | -122 | -7.44% |
| Bedford Township | 2,292 | 2,403 | 111 | 4.84% | 2,357 | -46 | -1.91% |
| Colerain Township | 419 | 483 | 64 | 15.27% | 494 | 11 | 2.28% |
| Cumberland Valley Twp | 630 | 710 | 80 | 12.70% | 743 | 33 | 4.65% |
| Harrison Township | 560 | 600 | 40 | 7.14% | 582 | -18 | -3.00% |
| Hyndman Borough | 445 | 448 | 3 | 0.67% | 492 | 44 | 9.82% |
| Londonderry Twp | 786 | 799 | 13 | 1.65% | 827 | 28 | 3.50% |
| Manns Choice Borough | 117 | 124 | 7 | 5.98% | 110 | -14 | -11.29% |
| Rainsburg Borough | 64 | 66 | 2 | 3.13% | 59 | -7 | -10.61% |
| Snake Spring Twp | 630 | 652 | 22 | 3.49% | 742 | 90 | 13.80% |
| **School District Total** | **7,522** | **7,925** | **403** | **5.36%** | **7,924** | **-1** | **-0.01%** |

**TABLE 9 - CHART A**



## Housing Unit Developments -- Summary

**Table 10** profiles a summary of the Housing Unit Developments of each Municipality that comprise the Bedford Area School District. The Data is based on information obtained from the Municipalities.

| **TABLE 10 Future Housing Development** | * * Total Approved New Housing Unit Development | Total Potential New Housing Unit Development | Total Approved & Potential New Housing Unit Development |
|---|---|---|---|
| Bedford Borough | 20 | 4 | 24 |
| Bedford Township | 43 | 110 | 153 |
| Colerain Township | 0 | 4 | 4 |
| Cumberland Valley Twp | 0 | 0 | 0 |
| Harrison Township | 0 | 0 | 0 |
| Hyndman Borough | 0 | 0 | 0 |
| Londonderry Twp | 0 | 0 | 0 |
| Manns Choice Borough | 0 | 0 | 0 |
| Rainsburg Borough | 0 | 0 | 0 |
| Snake Spring Twp | 59 | 0 | 59 |
| **School District Total** | **122** | **118** | **240** |
| | | | |
| **Students / Total Housing Units** | **0.28** | **0.28** | **0.28** |
| | | | |
| **Total Additional Students** | **35** | **34** | **69** |

** Inclusive of new unoccupied built homes

## Live Birth Data

**Tables 11-13 profile Live Birth data for the Bedford Area School District. The Data is based on information from the Pennsylvania Department of Education. The Tables illustrate a net decrease in the number of children entering Kindergarten and First Grade compared to the number of Births.**

**Table 11** profiles the number of Births from the years 2000 through the years 2016. The Live Birth data from years 2010-2016 are based on projections. The overall live birth data shows a projected decrease in the number of live births.

**Table 12** profiles the number of children entering Kindergarten from the year 2005 through the year 2021. Birth data is known for students entering Kindergarten in 2015, however, the student enrollment data from years 2012-2021 are based on PDE projections. (The assumption is made that the respective children born in 2000 will enter Kindergarten in the year 2005)

**Table 13** profiles the number of children entering First Grade from the year 2006 through the year 2021. Birth data is known for students entering First Grade in 2016, however, the student enrollment data from years 2012-2021 are based on PDE projections. (The assumption is made that the respective children born in 2000 will enter First Grade in the year 2006)

**TABLE 11**

| Year of Birth | Number of Births |
|---|---|
| 2000 | 165 |
| 2001 | 180 |
| 2002 | 168 |
| 2003 | 166 |
| 2004 | 144 |
| 2005 | 171 |
| 2006 | 147 |
| 2007 | 160 |
| 2008 | 167 |
| 2009 | 149 |
| 2010 | 140 |
| 2011 | 137 |
| 2012 | 134 |
| 2013 | 131 |
| 2014 | 128 |
| 2015 | 125 |
| 2016 | 122 |

**TABLE 12**

| Year Entering K | Number Entering K | % Birth to K |
|---|---|---|
| 2005 | 155 | 93.94% |
| 2006 | 175 | 97.22% |
| 2007 | 173 | 102.98% |
| 2008 | 144 | 86.75% |
| 2009 | 131 | 90.97% |
| 2010 | 145 | 84.80% |
| 2011 | 139 | 94.56% |
| 2012 | 143 | 89.38% |
| 2013 | 149 | 89.22% |
| 2014 | 133 | 89.26% |
| 2015 | 125 | 89.29% |
| 2016 | 122 | 89.05% |
| 2017 | 120 | 89.55% |
| 2018 | 117 | 89.31% |
| 2019 | 114 | 89.06% |
| 2020 | 112 | 89.60% |
| 2021 | 109 | 89.34% |

**TABLE 13**

| Year Entering 1st | Number Entering 1st | % Birth to 1st |
|---|---|---|
| 2006 | 164 | 99.39% |
| 2007 | 169 | 93.89% |
| 2008 | 178 | 105.95% |
| 2009 | 141 | 84.94% |
| 2010 | 139 | 96.53% |
| 2011 | 115 | 67.25% |
| 2012 | 130 | 88.44% |
| 2013 | 142 | 88.75% |
| 2014 | 148 | 88.62% |
| 2015 | 132 | 88.59% |
| 2016 | 124 | 88.57% |
| 2017 | 121 | 88.32% |
| 2018 | 119 | 88.81% |
| 2019 | 116 | 88.55% |
| 2020 | 113 | 88.28% |
| 2021 | 111 | 88.80% |
| | | |

## Live Birth Data

**The following Charts compares the Live Birth data from the preceding Tables with the Year Entering Kindergarten and the Year Entering First Grade**

**TABLE 11 & TABLE 12 - CHART A**

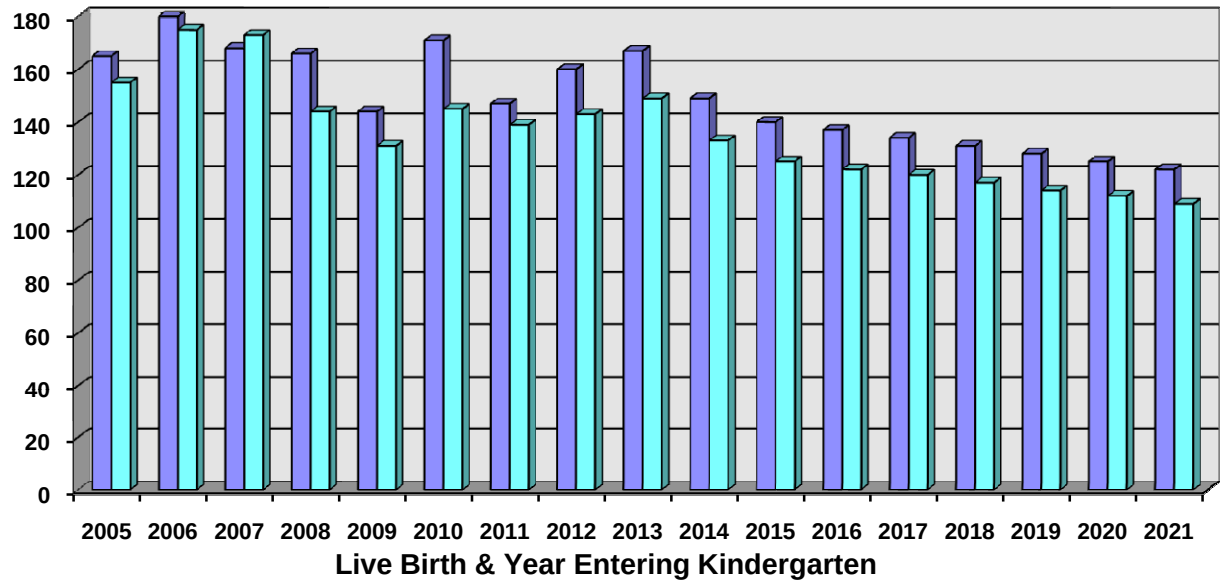
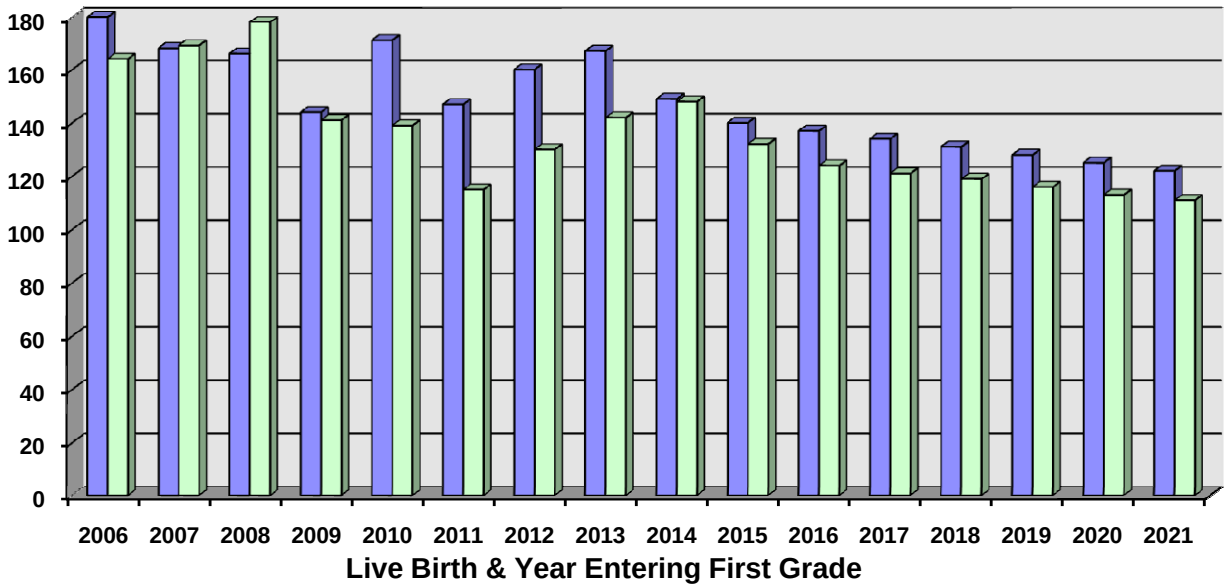



**TABLE 11 & TABLE 13 - CHART B**



## Student Population

## Projected Student Enrollment

**Method I (District-wide Projections)**: Student Enrollment projections supplied by the Pennsylvania Department of Education (PDE). The data shows a projected decline in the overall School District K-12 student population between 2011-12 and 2021-22.

- Projections are based on Live birth data.
- Projections may not account for in-migration trends of students moving into the School District.

**Method II (District-wide Projections)**: Student Enrollment projections based upon the average of historical increase of the past five years. The data shows a projected decline in the overall School District K-12 student population between 2013-14 and 2023-24.

- Projections are based on the First Grade Historical Trend of the past 5 years
- Historical trends should be evaluated in addition to available and future housing data.

## Student Enrollment / Capacity Evaluation

The Tables graphically illustrate the Projected Student Enrollment for each of the existing grade groupings vs. the current building capacity of the respective grade grouping.

Methods I and II profile the District Schools for the following grade groupings: K-5 which includes Bedford Elementary School; 6-8 which includes Bedford Middle School, and 9-12 which includes Bedford High School; also K-12 which includes all the Schools.

## Existing Educational Program

A summary of the School District's existing conditions is profiled by the Existing Educational Program data and graphic illustrations. The information includes: Existing Campus Structure for the Bedford Schools; Existing Grade Alignment; 2013-14 Student Enrollment; District and PDE Funcional Capacity; and the Highest Projected Enrollment for each grade grouping.

# DEMOGRAPHIC EXPLORATION SUMMARY PART B

## Student Population

## Existing Building Capacity

Room schedules for the Elementary and Secondary Schools provide data for the Existing Adjusted Building Capacity. Spaces that receive capacity are shown as well as each Building's Functional Capacity and Total Capacity.

## Building Capacity Overview

The Building Capacity Overview provides an explanation of Building Capacity and adjustments; including Functional Capacity andTotal Capacity as defined for the purpose of this study.

## Educational Program Requirements

The Educational Program Requirements provide an overview of the Bedford Area School District's Educational Program. The information was generated by the Bedford Area School District.

The Educational Program must be analyzed, as well as, the resulting affects of the existing facilities ability to meet the current and future needs of the educational program.

## Table 14 -- Method I - PDE Projected Student Enrollment

| | K | 1 | 2 | 3 | 4 | 5 | **K - 5** | 6 | 7 | 8 | **6 - 8** | 9 | 10 | 11 | 12 | **9 - 12** | **K-12** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2007-08** | 173 | 169 | 168 | 164 | 197 | 163 | **1034** | 197 | 190 | 172 | **559** | 169 | 199 | 194 | 170 | **732** | **2325** |
| **2008-09** | 144 | 178 | 171 | 174 | 165 | 200 | **1032** | 167 | 198 | 187 | **552** | 177 | 175 | 197 | 190 | **739** | **2323** |
| **2009-10** | 131 | 141 | 174 | 181 | 175 | 167 | **969** | 198 | 175 | 182 | **555** | 196 | 176 | 172 | 192 | **736** | **2260** |
| **2010-11** | 145 | 139 | 146 | 177 | 182 | 181 | **970** | 167 | 207 | 170 | **544** | 183 | 200 | 173 | 170 | **726** | **2240** |
| **2011-12** | 139 | 115 | 118 | 127 | 151 | 154 | **804** | 140 | 141 | 169 | **450** | 146 | 149 | 165 | 150 | **610** | **1864** |
| | | | | | | | | | | | | | | | | | |
| RATIOS | 0.893 | 0.887 | 0.968 | 0.995 | 0.853 | 0.977 | | 0.947 | 0.986 | 0.923 | | 0.981 | 0.970 | 0.945 | 0.952 | | |
| | | | | | | | | | | | | | | | | | |
| **2012-13** | 143 | 130 | 111 | 117 | 108 | 145 | **754** | 146 | 138 | 130 | **414** | 166 | 142 | 141 | 157 | **606** | **1774** |
| **2013-14** | 179 | 142 | 126 | 110 | 100 | 106 | **763** | 140 | 144 | 127 | **411** | 128 | 161 | 134 | 134 | **557** | **1731** |
| **2014-15** | 133 | 148 | 138 | 125 | 94 | 98 | **736** | 100 | 138 | 133 | **371** | 125 | 124 | 152 | 128 | **529** | **1636** |
| **2015-16** | 125 | 132 | 143 | 137 | 107 | 92 | **736** | 93 | 99 | 127 | **319** | 131 | 121 | 117 | 145 | **514** | **1569** |
| **2016-17** | 122 | 124 | 128 | 142 | 117 | 105 | **738** | 87 | 92 | 91 | **270** | 125 | 127 | 114 | 111 | **477** | **1485** |
| | | | | | | | | | | | | | | | | | |
| **2017-18** | 120 | 121 | 120 | 127 | 121 | 114 | **723** | 99 | 86 | 85 | **270** | 89 | 121 | 120 | 109 | **439** | **1432** |
| **2018-19** | 117 | 119 | 117 | 119 | 108 | 118 | **698** | 108 | 98 | 79 | **285** | 83 | 86 | 114 | 114 | **397** | **1380** |
| **2019-20** | 114 | 116 | 115 | 116 | 102 | 106 | **669** | 112 | 106 | 90 | **308** | 78 | 81 | 81 | 109 | **349** | **1326** |
| **2020-21** | 112 | 113 | 112 | 114 | 99 | 100 | **650** | 100 | 110 | 98 | **308** | 88 | 76 | 77 | 77 | **318** | **1276** |
| **2021-22** | 109 | 111 | 109 | 111 | 97 | 97 | **634** | 95 | 99 | 102 | **296** | 96 | 85 | 72 | 73 | **326** | **1256** |

**METHOD I:** The PDE model uses Enrollment Data reported annually by all local education agencies to the Division of Data Services on the Public School Enrollment Report. Resident Live Birth Data is provided by the Pennsylvania Department of Health. Grade progression is determined by calculating retention rates for grades 2 to 12 using the most recent five years of Enrollment Data. Retention rates for Kindergarten are determined by births five years earlier and for first grade from births six years earlier. These rates are evaluated to determine if a pattern is discernible, or if any retention rates are unusual. If a pattern is found, the pattern is continued in making the projections. Unusual retention rates are discarded and the average of the remaining rates is used in making the projections. Nongraded elementary and secondary students are prorated across grades before retention rates are calculated.

**Table 14A** compares the PDE and District Functional Capacity for each school with the Method I, 2011-12 PDE projected enrollment information.

| **TABLE 14A** School | District Functional Capacity | PDE Functional Capacity | Student Enrollment 2011-12 | 5 Year Growth | Projected Student Enrollment 2016-17 | 10 Year Growth | Projected Student Enrollment 2021-22 |
|---|---|---|---|---|---|---|---|
| Bedford E.S. | 814 | 950 | | | | | |
| **K-5 Total** | **814** | **950** | **804** | **-66** | **738** | **-170** | **634** |
| Bedford Middle School | 630 | 708 | | | | | |
| **6-8 Total** | **630** | **708** | **450** | **-180** | **270** | **-154** | **296** |
| Bedford High School / DAO | 607 | 683 | | | | | |
| **9-12 Total** | **607** | **683** | **610** | **-133** | **477** | **-284** | **326** |
| | | | | | | | |
| **K-12 Total** | **2,051** | **2,341** | **1,864** | **-379** | **1,485** | **-608** | **1,256** |

## Table 15 -- Method II - Projected Student Enrollment Based on Historical Data

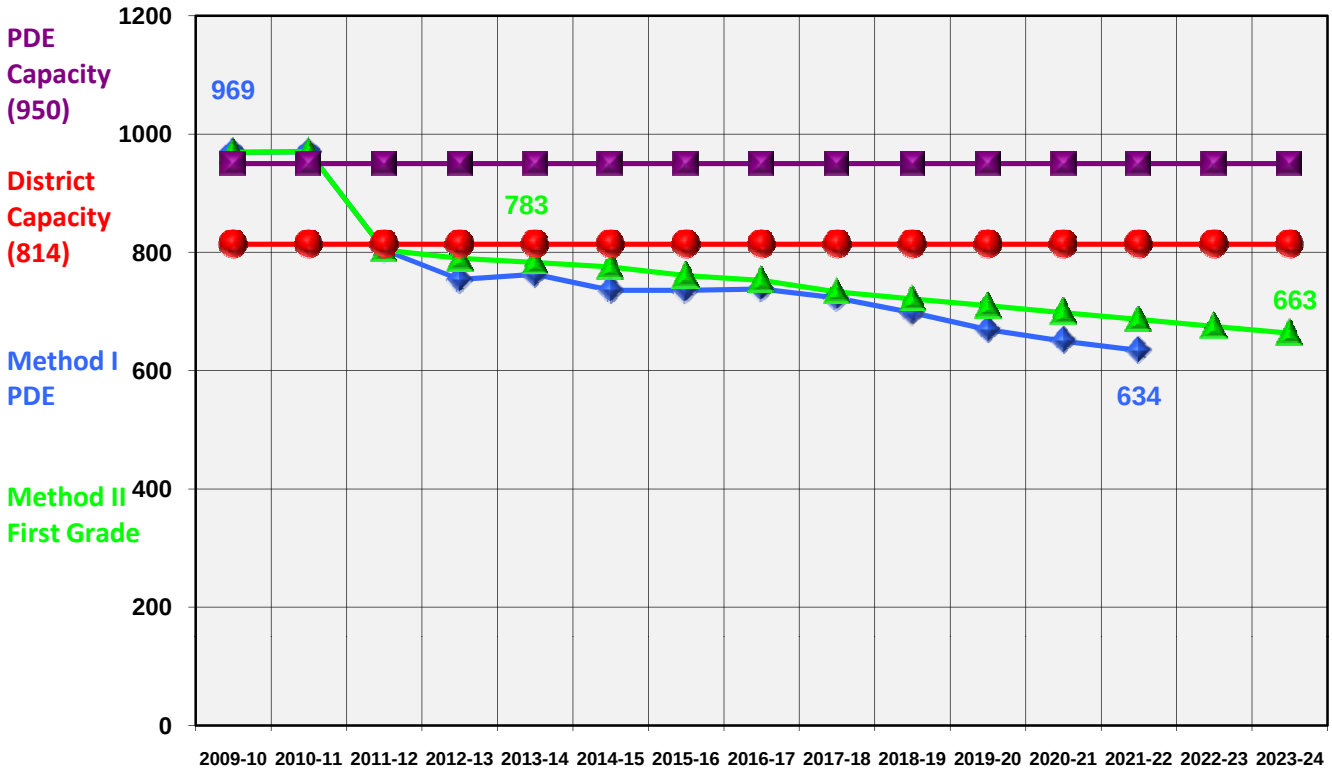
| | K | 1 | 2 | 3 | 4 | 5 | **K - 5** | 6 | 7 | 8 | **6 - 8** | 9 | 10 | 11 | 12 | **9 - 12** | **K-12** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2009-10** | 131 | 141 | 174 | 181 | 175 | 167 | **969** | 198 | 175 | 182 | **555** | 196 | 176 | 172 | 192 | **736** | **2260** |
| **2010-11** | 145 | 139 | 146 | 177 | 182 | 181 | **970** | 167 | 207 | 170 | **544** | 183 | 200 | 173 | 170 | **726** | **2240** |
| **2011-12** | 139 | 115 | 118 | 127 | 151 | 154 | **804** | 140 | 141 | 169 | **450** | 146 | 149 | 165 | 150 | **610** | **1864** |
| **2012-13** | 123 | 142 | 121 | 124 | 129 | 151 | **790** | 158 | 146 | 143 | **447** | 171 | 151 | 148 | 165 | **635** | **1872** |
| **2013-14** | 118 | 131 | 138 | 126 | 132 | 138 | **783** | 164 | 171 | 153 | **488** | 155 | 169 | 150 | 158 | **632** | **1903** |
| | | | | | | | | | | | | | | | | | |
| RATIOS | | 0.980 | 0.974 | 0.991 | 0.975 | 0.980 | | 0.963 | 1.003 | 0.949 | | 0.986 | 0.961 | 0.941 | 0.977 | | |
| | | | | | | | | | | | | | | | | | |
| **2014-15** | 130 | 129 | 128 | 137 | 123 | 129 | **775** | 133 | 164 | 162 | **460** | 151 | 149 | 159 | 147 | **605** | **1840** |
| **2015-16** | 128 | 127 | 126 | 126 | 133 | 120 | **760** | 125 | 133 | 156 | **414** | 160 | 145 | 140 | 155 | **601** | **1775** |
| **2016-17** | 126 | 125 | 124 | 125 | 123 | 131 | **753** | 116 | 125 | 127 | **367** | 154 | 154 | 136 | 137 | **581** | **1702** |
| **2017-18** | 124 | 123 | 122 | 123 | 121 | 121 | **733** | 126 | 116 | 119 | **361** | 125 | 148 | 145 | 133 | **551** | **1645** |
| **2018-19** | 121 | 121 | 120 | 121 | 120 | 119 | **721** | 116 | 126 | 110 | **353** | 117 | 120 | 139 | 141 | **518** | **1592** |
| | | | | | | | | | | | | | | | | | |
| **2019-20** | 119 | 119 | 118 | 119 | 118 | 117 | **710** | 115 | 117 | 120 | **351** | 109 | 112 | 113 | 136 | **470** | **1531** |
| **2020-21** | 117 | 117 | 116 | 117 | 116 | 115 | **698** | 113 | 115 | 111 | **339** | 118 | 105 | 106 | 110 | **439** | **1476** |
| **2021-22** | 115 | 115 | 114 | 115 | 114 | 113 | **687** | 111 | 113 | 109 | **333** | 109 | 114 | 98 | 103 | **425** | **1445** |
| **2022-23** | 113 | 113 | 112 | 113 | 112 | 112 | **675** | 109 | 111 | 107 | **328** | 108 | 105 | 107 | 96 | **416** | **1419** |
| **2023-24** | 111 | 111 | 110 | 111 | 110 | 110 | **663** | 107 | 110 | 106 | **323** | 106 | 103 | 99 | 104 | **413** | **1399** |

**METHOD II:** First Grade enrollment decreased by 2 students each year. This is based upon the average of historical increase of the past five years.

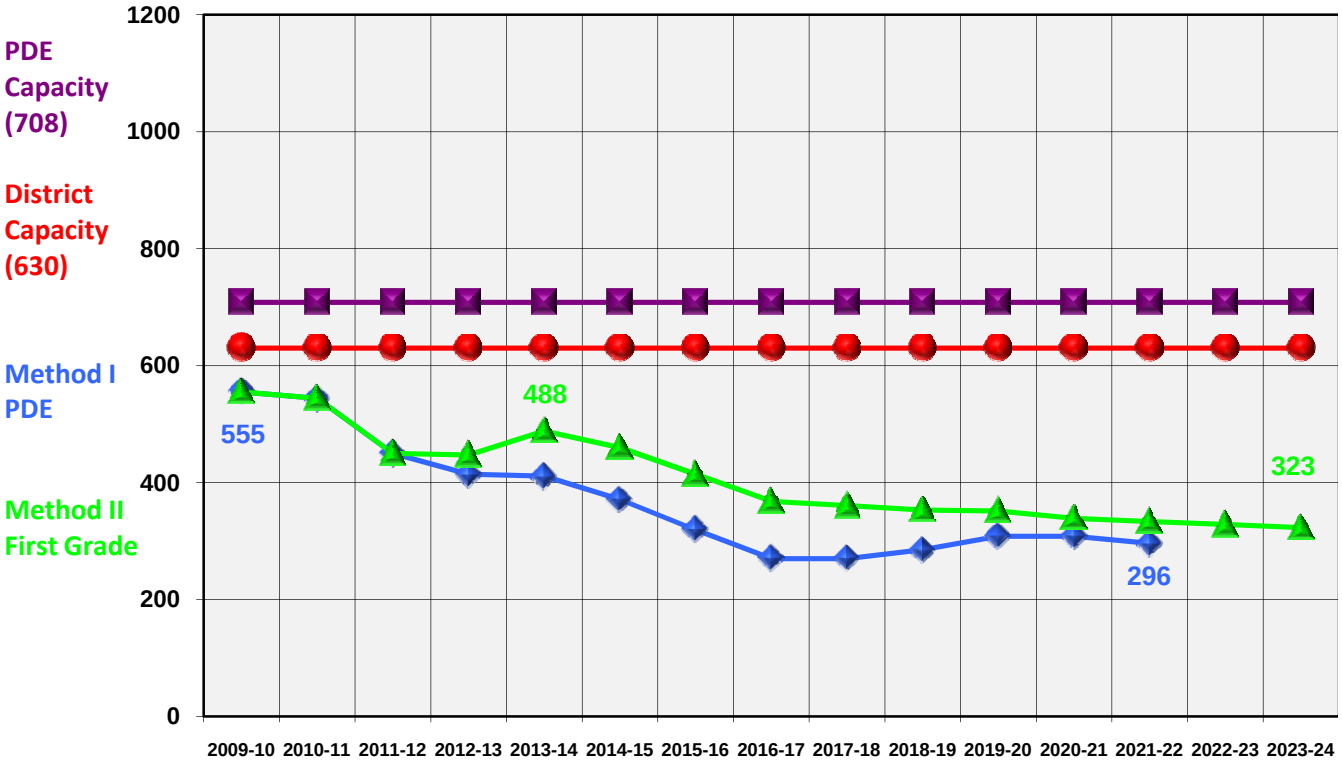
**Table 15A** compares the PDE and District Functional Capacity for each school with the Method II, 2013-14 projected enrollment information.

| **TABLE 15A** School | District Functional Capacity | PDE Functional Capacity | Student Enrollment 2013-14 | 5 Year Growth | Projected Student Enrollment 2018-19 | 10 Year Growth | Projected Student Enrollment 2023-24 |
|---|---|---|---|---|---|---|---|
| Bedford E.S. | 814 | 950 | | | | | |
| **K-5 Total** | **814** | **950** | **783** | **-62** | **721** | **-120** | **663** |
| Bedford Middle School | 630 | 708 | | | | | |
| **6-8 Total** | **630** | **708** | **488** | **-135** | **353** | **-165** | **323** |
| Bedford High School / DAO | 607 | 683 | | | | | |
| **9-12 Total** | **607** | **683** | **632** | **-114** | **518** | **-219** | **413** |
| | | | | | | | |
| **K-12 Total** | **2,051** | **2,341** | **1,903** | **-311** | **1,592** | **-504** | **1,399** |

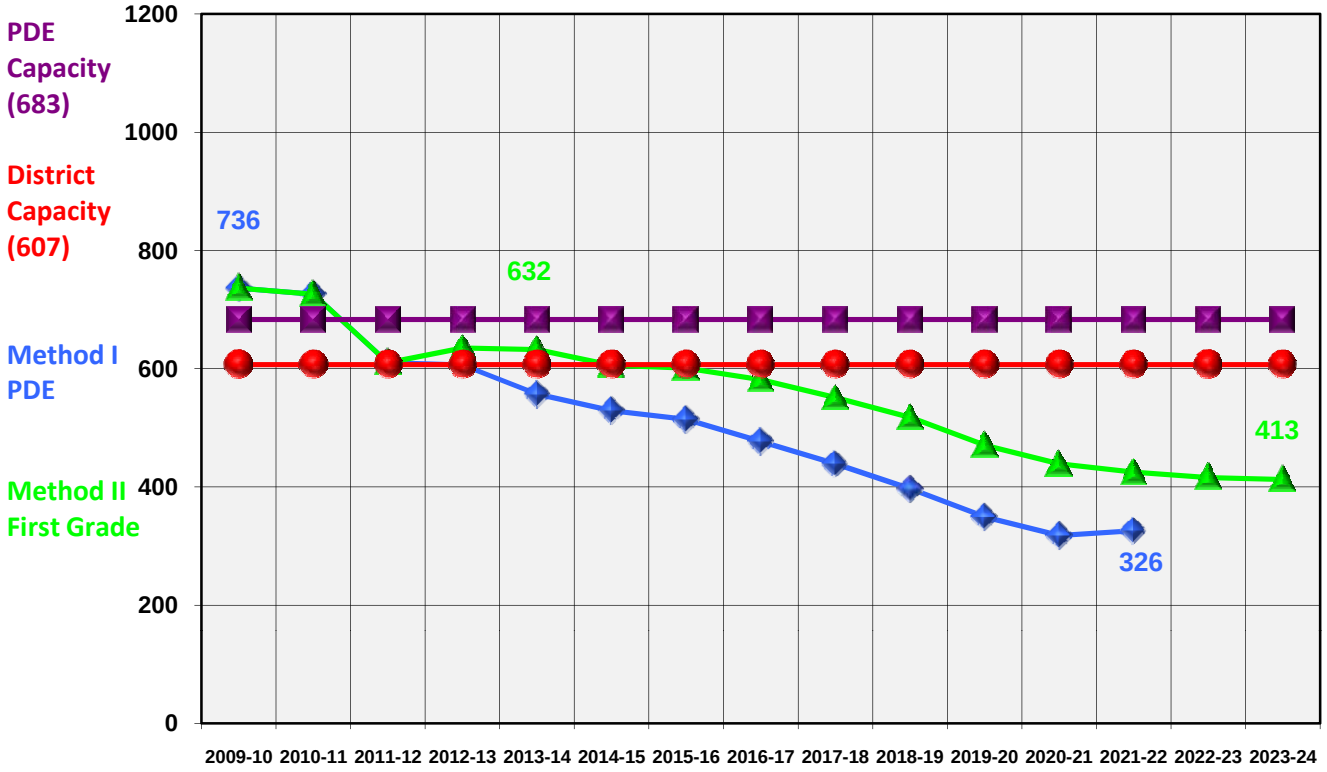
## TABLE 16 - Projected Student Enrollment (K-5) vs. Current Building Capacity



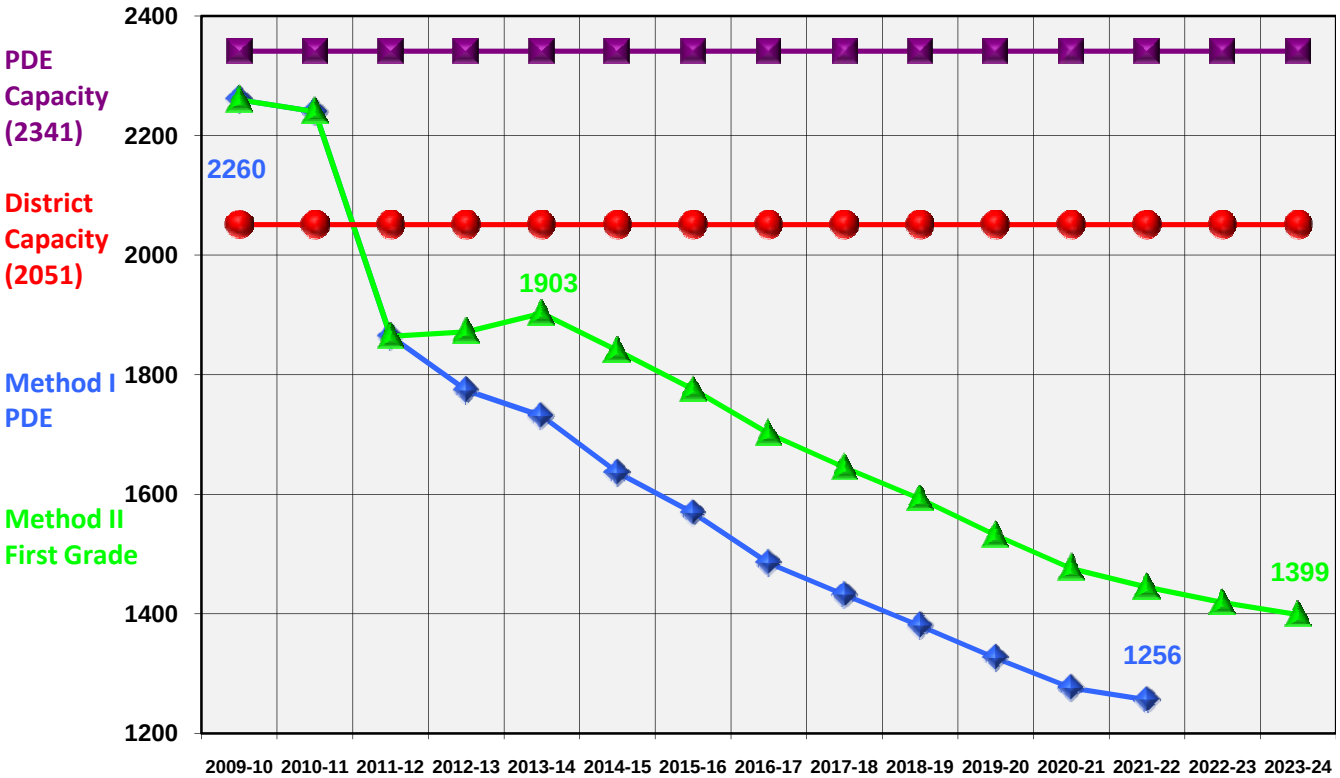

## TABLE 17 - Projected Student Enrollment (6-8) vs. Current Building Capacity



## TABLE 18 - Projected Student Enrollment (9-12) vs. Current Building Capacity




## TABLE 19 - Projected Student Enrollment (K-12) vs. Current Building Capacity



## EXISTING EDUCATIONAL PROGRAM

### Existing Building Capacity for Grades K-5, 6-8, 9-12, K-12

| Building | Existing Grade Alignment | 2013-14 Enrollment | ** Functional Capacity | | Highest Projected Enrollment | |
|---|---|---|---|---|---|---|
| | | | DIST | PDE | Methods | Current + 10% * |
| BEDFORD ELEMENTARY SCHOOL | K-5 | 783 | 814 | 950 | | |
| K-5 TOTAL | | 783 | 814 | 950 | 754 | 861 |
| BEDFORD MIDDLE SCHOOL | 6-8 | 488 | 630 | 708 | | |
| 6-8 TOTAL | | 488 | 630 | 708 | 414 | 537 |
| BEDFORD HIGH SCHOOL | 9-12 | 632 | 607 | 683 | | |
| 9-12 TOTAL | | 632 | 607 | 683 | 606 | 695 |
| K-12 TOTAL | | 1,903 | 2,051 | 2,341 | 1,774 | 2,093 |

* PDE allows Current Enrollment + 10% to be used as Highest Projected Enrollment for Project Grades.

** Elementary *Fuctional Capacity* are Graded Classrooms K-5; *Special Education Capacity* is not included in the Functional Capacity or Total Capacity.

# EXISTING ELEMENTARY BUILDING CAPACITY

| | | K-5 EXISTING | | | |
|---|---|---|---|---|---|
| | | BEDFORD ELEMENTARY | | | |
| | | No. | District | PDE | |
| CLASSROOMS | Kindergarten Full-day | 7 | 140 | 175 | CLASSROOMS |
| | First Grade | 7 | 140 | 175 | |
| | Second Grade | 6 | 120 | 150 | |
| | Third Grade | 6 | 138 | 150 | |
| | Fourth Grade | 6 | 138 | 150 | |
| | Fifth Grade | 6 | 138 | 150 | |
| SUPPORT | Support Clsrm / Other Use | 0 | | | SUPPORT |
| | Pre-Kindergarten Classroom | 0 | | | |
| | Spec Educ Classroom | 6 | | | |
| | S.E. / Gift S.G.I. | 3 | | | |
| | Seminar / S.G.I. | 4 | | | |
| | Large Group / L.G.I. | 4 | | | |
| | Large Group / L.G.I. | 1 | | | |
| | Computer Lab | 2 | | | |
| | Art / Music Classroom | 2 | | | |
| | Music Classroom | 1 | | | |
| ANCILLARY / CORE AREAS | Media Center | 1 | | | ANCILLARY / CORE AREAS |
| | Multi-Purpose Room / Gym | 1 | | | |
| | Stage / Platform | 1 | | | |
| | Kitchen Areas | 1 | | | |
| | Administration / Guidance | 1 | | | |
| | Health Suite | 1 | | | |
| | Faculty Dining / Workroom | 1 | | | |
| | Faculty / I.P.C. / Office | 8 | | | |
| | CAPACITY | | 814 | 950 | |
| | 2013-14 ENROLLMENT | | | 783 | |

P.D.E. Capacity: 25 students per classroom.
District Capacity: Grades K-2 = 20 students per classroom; Grades 3-5 = 23 students per classroom.

Elementary Functional Capacity includes Graded Classrooms, while the Total Capacity also includes Support Classrooms that are needed to support the educational program such as Math and Reading. Special Education and Pre-Kindergarten Capacity are not included in the Functional Capacity or Total Capacity.

The Existing adjusted building capacity may have been adjusted to represent the intended or adjusted use of space. The area of existing spaces may be an average of the respective spaces.

## EXISTING MIDDLE SCHOOL BUILDING CAPACITY

| | | 6-8 EXISTING | | | |
|---|---|---|---|---|---|
| | | BEDFORD MIDDLE SCHOOL | | | |
| | | No. | Dist | PDE | |
| CLSRMS | Classroom | 17 | 425 | 425 | CLSRMS |
| | Science Classroom / Lecture | | | | |
| | Science Lab | 3 | 60 | 60 | |
| SUPPORT | Spec Educ Classroom | 3 | 75 | | SUPPORT |
| | S.E. Seminar / S.G.I. | | | | |
| | Science Project Room / Greenhouse | 1 | | | |
| | Seminar / S.G.I. < 660 s.f. | 2 | | | |
| | Large Group / L.G.I. | 1 | | | |
| | Computer Lab | 2 | 40 | 40 | |
| | Music Classroom | 1 | 25 | 25 | |
| | Band / Orchestra / Choral | 1 | 25 | 25 | |
| | Art Classroom | 2 | 40 | 40 | |
| | Family & Consumer Science | 1 | 20 | 20 | |
| | T.E. Lab | 1 | 20 | 20 | |
| ANCILLARY / CORE AREAS | Media Center | 1 | | | ANCILLARY / CORE AREAS |
| | Gymnasium | 1 | 66 | 66 | |
| | Gymnasium | 1 | 66 | 66 | |
| | Fitness Room | 1 | | | |
| | Locker Room | 2 | | | |
| | Officials / P.E. Office | 2 | | | |
| | Stage / Platform | | | | |
| | Student Dining | 1 | | | |
| | Kitchen Areas | 1 | | | |
| | Administration / Guidance | 1 | | | |
| | Health Suite | 1 | | | |
| | Faculty Dining / Workroom | 1 | | | |
| | Faculty / I.P.C. / Office | 2 | | | |
| | CAPACITY | | 690 | 708 | |
| | 2013-14 ENROLLMENT | | | 488 | |

P.D.E.: 20-25 students per classroom; 90% P.D.E. Utilization Factor and 80% District Utilization Factor.

Secondary Functional Capacity includes all spaces that receive capacity except a Natatorium or District Administration. Special Education Capacity is not included in the Functional Capacity or Total Capacity.

The Existing adjusted building capacity may have been adjusted to represent the intended or adjusted use of space. The area of existing spaces may be an average of the respective spaces.

# EXISTING HIGH SCHOOL BUILDING CAPACITY

| | | 9-12 EXISTING | | |
|---|---|---|---|---|
| | | BEDFORD HIGH SCHOOL | | |
| | | No. | Dist | PDE |
| | Gymnasium | 1 | 66 | 66 |
| | Auxiliary Gymnasium | 1 | 33 | 33 |
| | Adaptive Gymnasium | 1 | | |
| | Locker Room / Team Room | 3 | | |
| | Weight / Wrestling / Cardio Rm | 2 | | |
| | Training Room | 1 | | |
| | P.E. / Coach Office | 5 | | |
| | P.E. / Athletic I.P.C. | 1 | | |
| | Tickets / Concession | 2 | | |
| | Reg Clsrm 660+ SF | 15 | 375 | 375 |
| | Reg Clsrm < 660 SF | 3 | | |
| | Science Classroom | 3 | 75 | 75 |
| | Science < 660 SF | 1 | | |
| | Science Proj Rm / Greenhouse | 1 | | |
| | Science Lab | 3 | 60 | 60 |
| | Special Education Clsrm. | 4 | | |
| | Spec. Educ. Seminar / S.G.I. | 1 | | |
| | S.G.I. / Student Activity | 1 | | |
| | Large Group Instruction | 1 | | |
| | Business Clsrm | 1 | 25 | 25 |
| | Business Lab | 2 | 40 | 40 |
| | Computer Lab (CAD) | 1 | 20 | 20 |
| | T.V. Studio S.G.I. | 1 | | |
| | Art Classroom | 1 | 20 | 20 |
| | Music Classroom | 1 | 25 | 25 |
| | Family & Consumer Science | 1 | 20 | 20 |
| | TE Shop <1800 sf | 1 | | |
| | Media Center | 1 | | |
| | Stage / Platform | 1 | | |
| | Auditorium | 1 | | |
| | Student Dining | 1 | | |
| | Kitchen Areas | 1 | | |
| | Administration / Guidance | 1 | | |
| | Health Suite | 1 | | |
| | Faculty Dining / Workroom | 2 | | |
| | Faculty / I.P.C. / Office | 8 | | |
| | District Administration Offices | 1 | 18 | 18 |
| | FUNCTIONAL CAPACITY | | 607 | 683 |
| | TOTAL CAPACITY | | 625 | 701 |
| | 2013-14 ENROLLMENT | | | 632 |

P.D.E.: 20-25 students per classroom; 90% P.D.E. Utilization Factor and 80% District Utilization Factor.

Secondary Functional Capacity includes all spaces that receive capacity except a Natatorium or District Administration. Special Education Capacity is not included in the Functional Capacity or Total Capacity.

The Existing adjusted building capacity may have been adjusted to represent the intended or adjusted use of space. The area of existing spaces may be an average of the respective spaces.

# BUILDING CAPACITY OVERVIEW

## Explanation of Building Capacity and Adjustments

To properly analyze the impact of students on the Bedford Area School District and its facilities, one must look at the functional capacity of the existing schools. The Pennsylvania Department of Education had established State standards and guidelines which, coupled with the District's program, can produce a rather straight forward calculation. The current use and State standards have been used to determine the building capacity. These capacities are then compared to the enrollment projections provided in this section of the Study.

The comparison between student projections and building capacities is shown in graphic illustration for the K-5; 6-8; 9-12; and K-12 grade alignments.

**The current building capacities have been evaluated and adjusted by the following:**

1. Capacity evaluation of current educational spaces against the Pennsylvania Department of Education (P.D.E.) guidelines for room size:
    a. Classrooms under 660 s.f. receive no capacity.
    b. Secondary spaces under 1,800 s.f. for Technology Education receive no capacity.
    c. Spaces must meet respective P.D.E. minimum size requirements to receive capacity.

2. Present use of space for activities other than original intent:
    a. Areas far too small to permit functional efficiency.
    b. Media Centers or other core facilities much smaller than recommended by guidelines.
    c. Absence of space recommended for some functions.
    d. Use of certain functional areas for general storage.
    e. Use storage spaces for instuctional areas.

3. Evaluation of building on Code requirements of physical facilities (i.e., toilet rooms).

4. Evaluation of specialized instruction beyond basic curriculum (i.e., music, art, learning support, speech and language, Chapter 1, gifted and talented, and ancillary facilities for staff).

Future needs must look beyond merely a comparison between population and capacity projections. There is a need to look at curriculum, special programs, classroom size for all programs, and use of space not designed for current use.

# BUILDING CAPACITY OVERVIEW

## Explanation of Building Capacity and Adjustments

### Elementary Level

The Pennsylvania Department of Education (P.D.E.) assigns 25 students per regular classroom greater than 660 s.f. for the purposes of formulating State reimbursement.

There is a tendency at the Elementary Level within School Districts that have multiple buildings to assign students from various regions, or neighborhoods. This tendency is compounded by the fact that students do not always come in even increments of 25 students per grade, per classroom; therefore, the student efficiency of classrooms is not always 100%. In addition to this phenomenon, most School Districts prefer smaller classroom sizes at the Elementary Level.

District capacities, therefore, also are provided for comparison with enrollment projections. In the case of the Bedford Area School District, the District guidelines are 20 students per classroom for Kindergarten through Second Grades and 23 students per classroom for Third through Fifth Grades.

For the purpose of this Study, Elementary Functional Capacity includes Graded Classrooms, while the Total Capacity also includes Regular Support Classrooms that are needed to support the educational program including Math and Reading. These Regular Support Classrooms could temporarily serve as enrollment "bubble" classrooms. Elementary Schools typically do not receive capacity for other support spaces such as Art, Music and Computer Labs because when students are using these spaces their respective classrooms are unoccupied. While Special Education Capacity and Pre-Kindergarten Capacity is listed separately and not included in the Functional Capacity or Total Capacity, they are included in reimbursement calculations.

### Secondary Grades

Students typically move between classes at the Secondary Level. Therefore, P.D.E. assigns capacity to specific instructional spaces that meet minimum size requirements. Regular classrooms greater than 660 s.f. receive a capacity of 25 while Laboratory spaces receive a capacity of 20. Since scheduling the facility at 100% is unlikely, a capacity utilization factor is then applied to the total. P.D.E. uses a capacity utilization factor of 90%, a more realistic, nationally recognized capacity utilization factor of 80% has been used for the District Capacity for the Middle School and High School.

For the purposes of this study, Secondary *Functional Capacity* includes all spaces that receive capacity with the exception of the DAO offices, while the *Total Capacity* also includes the District Administration Offices. While Special Education Capacity is listed separately and not included in the Functional Capacity or Total Capacity, it is included in reimbursement calculations.

# EDUCATIONAL PROGRAM REQUIREMENTS

## Overview of Bedford Area School District Educational Program

### Organization Description

The Bedford Area School District is a rural District located in Bedford County Pennsylvania. The School community represents four Boroughs and six Townships covering 300 square miles. The District enrollment is approximately 1900 students, organized in one K-5 Elementary School, one 6-8 Middle School, one 9-12 High School.

### Bedford Elementary School

Bedford Elementary is the newest facility in the School District. The building became a reality after five outlying Elementary buildings were closed to combine into one building; Bedford Elementary.

The facility houses grades kindergarten through fifth grade with approximately 800 students. The students are exposed to a core curriculum of mathematics, reading/language arts, science and social studies. In addition students are involved in physical education, art, music, library and computer laboratory time. Bedford Elementary promotes character education through the BEST Program. Each nine weeks, students are exposed to a character trait to model. The four character traits are Respect, Responsibility, Compassion and Perseverance. Behind the Elementary is the Environmental Center with approximately 24 acres of land, a cabin for students to have learning activities, trails and learning centers throughout the wilderness area. The staff of Bedford Elementary uses the motto: “Bedford Elementary…helping students be the BEST they can while building the foundation of life-long learning".

### Bedford Middle School

BMS is located at 440 East Watson Street in the Borough of Bedford. The recently renovated building has a student population of approximately 500 students in grades 6-8.

Students are provided an array of opportunities and experiences while focusing on a core academic curriculum. Subjects include math, reading, language arts, social studies, humanities, science, technology, music, art, family consumer science, industrial art, health and physical education. There is a team of learning support teachers as well as a guidance counselor and SAP team to address specific needs of students. There is also a wide variety of extracurricular activities and athletic programs. BMS uses a team approach utilizing various teacher teams that meet regularly to assess student learning and School quality in an effort to sustain a safe, successful, and positive learning environment.

# EDUCATIONAL PROGRAM REQUIREMENTS

## Overview of Bedford Area School District Educational Program

### Bedford High School

BHS is located at 330 East John Street in the Borough of Bedford. The building is the centerpiece of the Bedford School District and has a student population of approximately 650 students in grades 9-12.

Students are provided with a broad range of academic and technical opportunities to prepare them for the changing global marketplace they will soon enter. Subjects include math, language, social studies, humanities, science, technology, graphics, CADD, careers, business music, art, consumer science, and a wide range of AP courses complimented by a dual-enrollment program. There is a learning support teacher to address the needs of each grade level, as well as a SAP team and guidance counselors to address specific student needs. BHS offers a wide variety of extracurricular activities and athletic programs for students to participate. BHS uses a teacher leadership model to address the changing educational needs of our students and to continue a program of excellence in meeting our District mission to SELL Success (Students Empowered for Life-Long Success).

### Bedford County Technical Center

The Bedford County Technical Center is a career and Technical School operated by the Bedford Area School District and the Everett Area School District. The School offers a variety of secondary training programs both on site and at the home Schools. Building Trades, Welding, Information Technology, Automotive, Cosmetology, Health Technologies, Culinary Arts, Production Technology, Engineering Technology, Accounting, and Childcare are offered. The mission of the Technical Center is not only to develop workplace skills for students in trade areas, but to use the technology infrastructure of the School to connect students to learning. The acquisition of many Pennsylvania State Standards is supported by planned instruction in the technological areas.

# EDUCATIONAL PROGRAM REQUIREMENTS

## Overview of Bedford Area School District Educational Program

### Core Purpose

### Mission

Students Empowered for Life Long Success - SELL Success

### Vision

The Bedford Area School District vision is encompassed in the following eight indicators.

1. The curriculum of the District is flexible and meets the needs of all students.

2. Assessment shows real-time performance data that is continuously used to determine the effectiveness of instruction for individual students.

3. The capital investments of the District (grounds, buildings, equipment, and vehicles) are planned for and maintained to be safe, meet the needs of the various programs, and create a positive educational atmosphere for both students and community.

4. Stakeholder groups within the community are involved in various aspects of the School program.

5. Instruction is individualized, incorporating the best-known practices of the time and possessing the flexibility to accommodate various learning styles.

6. Leaders in the District are dynamic and passionate individuals who embrace the core values, beliefs and mission of the District. Decisions are future focused, data driven and student centered.

7. Personnel are Highly qualified and demonstrate integrity, compassion, trust and respect for others in the learning community. Personnel utilize technology to expand learning opportunities beyond the School walls. Data informed decisions drive instruction for individual student success.

8. Technology is an integral part of every classroom enhancing learning opportunities and linking students to worldwide educational opportunities.

### Shared Values

Members of the Bedford Area School Community share the following values:

1. Integrity demonstrated by people that understand, consider, and accept the impact and consequences of personal actions and decisions. Integrity includes within it being trustworthy to the people and principles of the School community and loyal to the people and profession with whom and within which they work.

2. Respect which includes compassion for the well being of others and their environment through acts of caring, generosity, kindness, service and fairness.

3. Responsibility embodied in a strong wok ethic and citizenship. Responsible people strive for excellence, taking pride in their work, always giving their best efforts and contributing to the well being of their communities as responsible citizens acting in positive and creative ways.

4. Perservance as shown by the desire and willingness to pursue goals and visions in spite of adversity or difficulties because the attainment of them is best for the School people and the School community.

# EDUCATIONAL PROGRAM REQUIREMENTS

## Overview of Bedford Area School District Educational Program

### Goals

**Goal: BROADEN INSTRUCTIONAL AND ASSESSMENT ACTIVITIES OF TEACHERS**
*Description:* Deepen essential content knowledge and expand instructional and assessment skills.

**Goal: COMMUNITY INVOLVEMENT**
*Description: Increase community involvement in the Schools.*

**Goal: FOUR-YEAR GRADUATION RATE (for Districts and Schools that graduate seniors)**
*Description:* Graduation rate will meet an 80% threshold and/or show growth.

**Goal: IMPROVING THE TEACHING AND LEARNING ENVIRONMENT**
*Description: To provide opportunities for all professional personnel to enhance teaching effectiveness, understand student learning, deal effectively with classroom disruptions, participate on quality councils for School improvement and on learning teams to implement change to enhance student achievement.*

**Goal: MATHEMATICS**
*Description:* At least 45% of all students will be proficient in Mathematics, as measured by the annual state-wide PSSA assessments.

**Goal: READING**
*Description:* At least 54% of all students will be proficient in Reading, as measured by the annual state-wide PSSA assessments.

**Goal: SPECIAL EDUCATION**
*Description:* Students with disabilities will demonstrate continued educational progress in the least restrictive environment.

**Goal: STANDARDS AWARENESS, DEVELOPMENT AND IMPLEMENTATION**
*Description:* To provide opportunities that focus on standards awareness, development and implementation.

**Goal: STUDENT ATTENDANCE**
*Description:* Student attendance will meet a 90% threshold and/or show growth.

**Goal: STUDENT PARTICIPATION IN STATE ASSESSMENTS**
*Description:* At least 95% of eligible students will participate in required state-wide assessments.

**Goal: TECHNOLOGY**
*Description:* Technology is an integral part of every classroom enhancing learning opportunities and linking students to worldwide educational opportunities.

# EDUCATIONAL PROGRAM REQUIREMENTS

## Overview of Bedford Area School District Educational Program

### Academic Standards

The PA Academic Standards shall guide the Bedford Area School District educational curriculum in the following areas:

1. Reading, writing, speaking and listening

2. Mathematics

3. Science and technology

4. Environment and ecology

5. Social studies including History, Geography, Civics and government, and Economics

6. Arts and humanities

7. Career education and work

8. Health, safety and physical education

9. Family and consumer science

10. World languages.

The academic standards describe the knowledge and skills that students will be expected to demonstrate at the proficient level. The Bedford Area School District will provide for the attainment of the academic standards as per Chapter 4, Section 4.12.

### Graduation Requirements

Beginning with the class of 2007, in order to be eligible for graduation from the Bedford Area School District, a student shall meet the requirements of completing the required courses of planned instruction at the District defined Basic level or above, complete a culminating project, and demonstrate mastery of the PA Academic Standards by either attaining a score at the state performance level of proficient or advanced on the PSSA or other reliable and valid local assessment(s) aligned with the state standards or by completing the graduation requirements outlined in the students Individual Educational Plan. These requirements are further described below

Planned Instruction Requirements for Grades Nine through Twelve

| Subject | Credits |
|---|---|
| English | 4 credits |

# EDUCATIONAL PROGRAM REQUIREMENTS

## Overview of Bedford Area School District Educational Program

### Graduation Requirements continued

| | |
|---|---|
| Mathematics | 4 credits (3 math credits with 4 science credits) |
| Science | 4 credits (3 science credits with 4 math credits) |
| Social Studies | 3 credits |
| Driver's Ed. (classroom) | 0.25 credit |
| Music | 0.5 credit |
| Health/Safety/PE | 2 credits |
| Library Science | 0.25 credit |
| Fine Arts | 0.25 credit |
| Family & Con Science | 0.25 credit |
| Senior Humanities or | 1 credit |
| Senior Career Course | |
| Technology Applications | 0.5 credit |

Beginning with the graduation class of 2010, in order to be eligible for graduation from the Bedford Area School District, a student shall have completed a course for credit taken using electronic engagement to complete the requirements.

### District Grading Structure

| | | |
|---|---|---|
| A | 93 to 100 percent | Superior |
| B | 83 to 92 percent | Advanced |
| C | 73 to 82 percent | Proficient |
| D | 65 to 72 percent | Basic |
| F | 64 and below | Below Basic |

# EDUCATIONAL PROGRAM REQUIREMENTS

## Overview of Bedford Area School District Educational Program

### Goals, Strategies and Activities

### Measurable Annual Improvement Targets

Early in the School year, each School in the BASD shall, through a team of teachers, administrators, and other School staff, review the student achievement data including PSSA scores, attendance, graduation rate if a High School, percentage of failure or retention and other pertinent local data to determine the overall success of the curriculum and instruction. Recommendations from the School group will be taken to the School learning team by the School administrator and suggestions made to the School and central office administration for improvement.

Within each School, each grade level team, or curriculum team in the case of a High School, will annually review the collected achievement data for the students who were in the grade level or content area the previous year and create a written report to the principal about student achievement along with any suggestions.

Each School in the District shall annually, through a structure entitled the Quality Council, evaluate through the use of attendance data, disciplinary records, student surveys and any other collected data the safeness of the School environment in terms of physical safety, emotional safety, and social safety for students and staff.

In the Bedford Area School District, all students and disaggregated subgroups of students with 40 or more members will show continuous sustained improvement in math. Evidence of improved student achievement in math for the students and subgroups will be the following percentage of students attaining a score of proficient or advanced on the PSSA in the following years: 2007 - 45%, 2008 - 48.67%, 2009 - 52.33%, 2010 - 56%, 2011 - 67%, 2012 - 78%

In the Bedford Area School District, all students and disaggregated subgroups of students with 40 or more members will show continuous sustained improvement in reading, speaking, and listening. Evidence of improved student achievement in reading, speaking, and listening for the students and subgroups will be the following percentage of students attaining a score of proficient or advanced on the PSSA in the following years: 2007 - 54%, 2008 - 57%, 2009 - 60%, 2010 - 63%, 2011 - 72%, 2012 - 81%

### Curriculum, Instruction and Instructional Materials

The curriculum of the Bedford Area School District is uniquely engaging and aligned with the state standards to meet the needs of each student. The curriculum is continually evolving to include current trends in research to empower life-long learning.

Indicators of success will be as follows:

- Students are successful meeting or exceeding state standards as evidenced on the PSSA.
- Each student exhibits growth.
- The curriculum is periodically evaluated, adapted and updated to meet current student needs.

When operating at it's ideal best, instruction in the Bedford Area School District will be individualized, incorporating the best known practices of the time and possessing the flexibility to accommodate various learning styles.

# EDUCATIONAL PROGRAM REQUIREMENTS

## Overview of Bedford Area School District Educational Program

Indicators of success will be as follows:

- Students are engaged.
- Teachers use multiple instructional strategies.
- Each student's learning style is identified and accommodated.

Curriculum, instruction and instructional materials will be selected and employed as per the following:

- will motivate students to become self-directed learners.
- are appropriate to student's developmental levels.
- are delivered based upon students' educational needs.
- correspond to the predominant learning style of each student.
- are based on best practice.
- are delivered using the most efficient and effective teaching strategies.
- align with Pennsylvania State Standards.
- use technology to enhance instruction.
- utilize community resources to connect students to learning.
- creates a psychologically safe environment for students to learn.

### Assessments and Public Reporting

Real-time performance data is continuously used to determine the effectiveness of instruction for individual students. The School District and teachers consistently plan instruction to advance student learning based upon the performance data. All stakeholders have immediate accessibility to appropriate data.

Assessment indicators of success are as follows:

- The ability to collect real-time individual student data.
- The stakeholders' ability to access and interpret data.
- That student performance will show measurable improvement.

In the Bedford Area School District, students in grades Kindergarten through 11 will be assessed to determine the degree to which students are achieving academic standards using assessment instruments that are specifically aligned to the state standards in reading and math. Through the use of formative assessments, teachers of students in grades Kdg through grade 7 will receive feedback about their students achievement three times per year. Through the use of summative state assessments or assessments that are valid and reliable at measuring state standards in reading and math, teachers of students in grades 3 through 11 will receive feedback about how the students they taught the previous year achieved on reading and math state standards.

The formative information will be used to adjust the curriculum, delivery, and learning experiences through out the year and the summative assessments will be used to adjust curriculum, delivery, and learning experiences for students coming into those grade levels.

Each year, a report will be made relative to students successes on the state PSSA and delivered to the School board at a public meeting in September or October. In addition, the annual District newsletter and individual building newsletters will carry information about how parents can access the School District's report card on the PDE website.

# EDUCATIONAL PROGRAM REQUIREMENTS

## Overview of Bedford Area School District Educational Program

### Targeted Assistance For Struggling Students

Targeted assistance for struggling students will take the form of the following:

Kindergarten – Need for remediation is identified through weekly evaluations, student progress on report cards and teacher observation. Individual teachers remediate two times per week in the areas of reading and/or math.

Grade 1 – Need for remediation is identified through authentic assessments, DIBELS, report card grades and teacher observation. Reading remediation is done through Title I, small group work and a weekly reading anchor that is completed in each classroom. Math remediation is done during the additional math periods that are scheduled three days per week.

Grade 2 – Need for remediation is identified through authentic assessments, DIBELS, report card grades and teacher observation. Reading remediation is completed in the individual classroom by the classroom teacher and in Title I. Math remediation is completed during one additional math period per week (presently focusing on math facts).

Grade 3 – Need for remediation is identified through a review of the academic standards/ eligible content pre and post tests, teacher input from report cards, observations and the 4Sight assessments. Three groups are created after each pre test and include: one group that is remediated and two that are enriched in the standard's content areas five times per week.

Grade 4 – Need for remediation is identified through the 4Sight test. Remediation takes place in math during the additional math period that is scheduled each day. Reading remediation is done in the individual classroom. The forth grade also uses SRA Reading as a reading remediation tool.

Grade 5 – Need for remediation is identified through the 4Sight assessment. Students are grouped for remediation into six groups that meet three times per week "Helping Everyone Learn Proficiently" (H.E.L.P.) to practice reading and math anchors.

Middle Level - Need for remediation will be identified through the use of 4Sight assessment and other in class assessments of students proficiency on state standards. A during the day tutoring program in math will occur for 6th and 7th grade students. Additionally, each day there is a 35 minute intensive tutorial period in which at least two adults assisting students who are not achieving at the proficient level in the School.

High School Level - An advisory program is being implemented in the High School as part of the 720 High Schools initiative and additional learning activities will be a product of the program. Students not scoring proficient on the PSSA will receive a remediation program the following year and re-assessed on the state test or other valid and reliable tests to determine proficiency.

### Support for Struggling Schools

Students are invited to attend any School in the District where their grade configuration is taught if they are unable to reach achievement targets in the School they currently attend. Schools that experience failure to routinely meet the annual student achievement improvement targets will be required to follow the state School improvement process to determine needs and resources in order to move toward attainment of improvement targets.

# EDUCATIONAL PROGRAM REQUIREMENTS

## Overview of Bedford Area School District Educational Program

### Qualified, Effective Teachers and Capable Instructional Leaders

Leadership

Persons holding leadership positions in the Bedford Area School District will be dynamic, passionate, and competent individuals. Their leadership embraces the core values, beliefs and mission of our District. Decisions are future focused, data driven, and student centered.

Indicators of Success:

- No interruption of services to students, staff and community during transition periods.
- Leadership assessment instrument reflects the Districts leadership vision
- Data reflects a variety of individuals to assume leadership roles

Personnel

Highly qualified personnel will demonstrate integrity, compassion, trust and respect in the learning community. Personnel will continue to utilize technology to expand learning opportunities beyond the School walls. Data informed decisions will become second nature for personnel to drive instruction for individual student success.

Indicators of Success:

- More students proficient test scores reflect the change in using data.
- Drop down screens showing discussions with other countries, engaging in virtual tours (visual)
- The learning community is actively engaged in the learning process

District's and Schools within the District have the goal of meeting AYP as per the state guidelines in the curriculum areas where such is measured. In addition, the District and it's Schools seek to create a learning environment where students will be able to successfully do the following:

- acquire, analyze, and organize information from a variety of sources.
- evaluate information from a variety of sources and apply it to solve problems.
- apply learned information to new situations.
- transfer new knowledge to others.
- demonstrate effective communication skills to a variety of audiences.
- create meaningful learning goals to stay marketable.
- demonstrate time management skills to deal with saturation.
- creatively apply problem solving skills.
- demonstrate an initiative to understand arts and cultures.

The Bedford Area School District deploys its most effective and highly qualified teachers to meet the learning needs of students who are below proficiency or are at risk of not graduating by hiring only highly qualified teachers and providing staff development so that all teachers are equally effective. If the District administration believes a teacher does not meet those two criteria, the teacher will receive and unsatisfactory rating until such time as they do or until such time as they no longer work in the District.

# EDUCATIONAL PROGRAM REQUIREMENTS

## Overview of Bedford Area School District Educational Program

### Parent and Community Participation

The District follows all guidelines and recommendations for the notification of parents of regular and exceptional students through information within the School, published on the District website, and published in the local newspaper. The District encourages and supports partnerships between community groups and the School system for education and community awareness related functions. The buildings of the District are extensively used by the community and through such relationships, additional partnerships have formed such as the School Community Council, a nonprofit entity that works to enhance the role of community in the Schools.

The Schools, particularly the Elementary School houses out of District programs in after School child care, pre-kindergarten experiences, mentoring, tutoring, and other community and parent friendly programs.

The Elementary School has great participation by parents in family fun nights that have educational endeavors embedded in the activities at least twice a year.

The Middle School has parent friendly evenings and days where parents are invited into the Schools to participate with their children in learning and fun activities.

The High School supports many parent groups who get involved as boosters, friends, committee participants and parent volunteers.

The District and community together believe that parents, businesses, and community members are empowered to be engaged in the education process, can articulate and support the mission of BASD, and play a meaningful role in education through their involvement and their expertise (job shadowing, mentoring, job fairs).

How we plan for and maintain our buildings, grounds, equipment, and vehicles.

- The School District buildings and grounds belong to the community. Stakeholders are welcomed
- Facilities are entrusted to the Stakeholders who serve as wise caretakers
- School District buildings and modes of transportation meet the physical and safety needs of students and stake holders
- Students and stake holders find a safe, healthy, and aesthetically pleasing learning environment
- Our facilities are flexible and can be changed to accommodate different types of learning
- Our capital investments are kept neat, and clean to create a positive educational atmosphere
- The School District facilities meet or exceed local, state, and federal building regulations and codes
- The School District facilities incorporate the latest technological advances

Education happens when the whole community is involved. The flow of cooperation and communication has no barriers.

Indicators of Success

- Teachers clamoring to be involved in the business community
- Business community clamoring to be involved in School life
- PTO has evolved into a stake holders organization K-12

### Pre-Kindergarten Transition

No Pre-K Offered

# FACILITIES INTRODUCTION

This section of the Feasibility Study is a review of the existing Bedford Area School District Facilities including: Bedford Elementary School, Bedford Middle School, and Bedford High School with District Administration Offices (DAO). All facilities include general data, plans, spatial evaluation, and a general investigation.

Following each building's floor plans, which show existing space utilization, is a general investigation identifying deficiencies, recommending solutions, and furnishing estimates of probable construction costs.

This analysis is based upon visits to the buildings and interviews with District personnel, current building codes, Department of Education standards, energy conservation measures, and the American Disability Act Accessibility Standards (ADA). The analysis is divided into eight major facility components: site, exterior, interior, heating/ventilation, plumbing, electrical, code deficiencies and miscellaneous upgrades per building. The Facility Evaluation Criteria is outlined on the following pages.

# FACILITIES SUMMARY

## Bedford Area School District Existing Facilities

The following information is included for each existing Facility: General Data, Exterior and Interior Building Photos, Aerial Site Views, Site Plan and Floor Plans, Room Schedule, Summary of Costs, and Building Improvements and Construction Costs data.

### Bedford Elementary School


**Built:** 1996

**Site size:** 21 acres
**Architectural Area:** 115,105 SF

**PDE Total Capacity:** 975

**PDE Replacement Value:** $16,056,300
**20% Rule:** $ 3,211,260

**Building Improvements and Construction Costs**
**Total Building:** $6,411,500

### Bedford Middle School

**Built:** 1978

**Site size:** 21.5 acres
**Architectural Area:** 81,000 SF

**PDE Total Capacity:** 708

**PDE Replacement Value:** $15,588,036
**20% Rule:** 3,117,607

**Building Improvements and Construction Costs**
**Total Building:** $331,300

# FACILITIES SUMMARY

## Bedford High School

| | |
|---|---|
| **Built:** | 1888, additions 1927, 1934, 1946, 1954, & 1996 |
| **Site:** | 3.5 acres |
| **Architectural Area:** | 177,390 SF |
| **PDE Total Capacity:** | 724 (742 with DAO) |
| **PDE Replacement Value:** | $16,336,614 |
| **20% Rule:** | $ 3,267,323 |

**Building Improvements and Construction Costs**

| | |
|---|---|
| **Total Building:** | $19,731,000 |

The evaluation of the existing facilities is based upon visits to the buildings, interviews with District personnel, and our own experience with educational projects.

The following current, applicable codes and standards are used in the evaluation of the building and its systems / components:

- 2009 International Building Code Categories
- Americans with Disability Act (ADAAG 1994)
- Municipal Zoning Ordinance
- Other Codes used in the evaluation for compliance are the National Plumbing and Electrical Codes

The evaluation criteria are based upon the following categories: Accessibility / ADA, Building codes / Safety, Aesthetics / Environment, Performance / Energy, and Program and Facility requirements.

## ■ ACCESSIBILITY / ADA STANDARDS / COMPLIANCE

Facilities should provide access to all program areas and activities for all individuals, per the Americans with Disabilities Act Accessibility Guidelines, 1990 (ADA/ADAAG), as revised 1994. The Americans with Disabilities Act (ADA) is a civil rights act, effective 26 January 1992, enforced by the United States Justice Department and Civil Law, not a building code. It is comprised of five major sections (Titles I – V) as follows:

TITLE I – Equal Employment Provisions (hiring)
TITLE II – Nondiscrimination in State and Local Government Services (public buildings)
TITLE III – Nondiscrimination by Public Accommodations (privately funded facilities)
TITLE IV – Telecommunications Relay Services
TITLE V – Miscellaneous Provisions

Public schools are State agencies/local governmental units and would fall under TITLE II. A public entity must ensure that individuals with disabilities are not excluded from services, programs, and activities because existing buildings are inaccessible. Public entities do not necessarily have to make each of their existing facilities accessible. They may provide program accessibility by a number of methods including alteration of existing facilities, construction of additional facilities, relocation of a service or program to an accessible facility, or provision of services at alternate accessible sites. Structural changes needed for program accessibility must be made as expeditiously as possible, but no later than 26 January 1995. Barrier removal needs to be accomplished only when it is “readily achievable” to do so and technically feasible. Readily achievable means easily accomplishable and able to be carried out without much difficulty or expense. Alternatives may be considered to overcome such barrier or non-compliance.

## ■ ACCESSIBILITY / ADA STANDARDS / COMPLIANCE (Con't)

Alterations when made should be done in a manner that require compliance with the standards to the maximum extent feasible. An alteration is a change, which affects, or could affect, the usability of the building or facility. It also includes "elements," such as door handles and faucet controls. If alterations are made to an area that contains a primary function, a path of travel to that area should be made accessible. The ADA addresses the issue of accessible design for large assembly areas, with the intent of integrating wheelchair seating with regular seating. That is, individuals in wheelchairs should have a line of sight comparable to the general student body. Too often, wheelchair areas are confined to the back or to the front.

As part of the upgrading and alteration of District facilities, the District's requirements for ADA compliance should reflect the overall integration of people who may wish to participate in activities within these facilities, and who may be on staff serving these facilities. The District may wish to review its policy, procedure, and practice, with regard to use at these facilities. The physically challenged person should have the ability to gain entry and be routed to seating easily. The required number of seats for the disabled should be located to allow for a maximum of seating location choices. The following areas are reviewed:

(1) Provide the appropriate number of accessible parking spaces near entrance to all facilities.
(2) Provide an accessible route from parking spaces to building entrances.
(3) Provide accessible entrance at all facilities.
(4) Provide proper signage both on the exterior, as well as on the interior, designed to guide, direct, and inform individuals with disabilities.
(5) Provide accessible interior route to all primary activities and program areas.
(6) Provide building elements (i.e. railings, doors, hardware, restrooms, drinking fountains, elevators, public telephone, seating, work stations, etc.) to allow same opportunities for individuals with disabilities.
(7) Provide alternate solutions to move activities and program areas to accessible areas.

## ■ BUILDING CODES / SAFETY

Buildings must meet the codes that are applicable at the time of construction. Existing buildings may not meet the requirements of the most recently adopted codes, but are in compliance with the codes that were in effect at the time of construction or renovation.

Existing buildings as they stand are not required to meet current code simply due to the adoption of newer codes. Any new construction or renovations would be required to comply with the current applicable code.

The type, limit of area of work, and nature of work will be the determining factor as to the required level of compliance with the most recently adopted codes and be categorized under the following levels.

### IEBC-SECTION 304 REPAIRS

304.1 **General**. Buildings and structures, and parts thereof, shall be repaired in conformance with Section 301.2. Work on undamaged components that is necessary for the required *repair* of damaged components shall be considered part of the *repair* and shall not be subject to the requirements for alterations in this chapter. Routine maintenance required by Section 301.2, ordinary repairs exempt from permit in accordance with Section 105.2, and abatement of wear due to normal service conditions shall not be subject to the requirements for repairs in this section.

### IEBC-SECTION 403 ALTERATION-LEVEL 1

403.1 **Scope**. Level 1 alterations include the removal and replacement, or the covering, of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose.

403.2 **Application**. Level 1 alterations shall comply with the provisions of Chapter 5.

### IEBC-SECTION 404 ALTERATION-LEVEL 2

404.1 **Scope**. Level 2 alterations include the reconfiguration of space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment.

404.2 **Application**. Level 2 alterations shall comply with the provisions of Chapter 5 for Level 1 alterations, as well as the provisions of Chapter 6.

**IEBC-SECTION 405 ALTERATION-LEVEL 3**

405.1 **Scope**. Level 3 alterations apply where the work area exceeds 50 percent of the aggregate area of the building.

405.2 **Application**. Level 3 alterations shall comply with the provisions of Chapters 5 and 6 for Level 1 and 2 alterations, respectively, as well as the provisions of Chapter 7.

Facilities should meet the following health and safety issues:

(1) Pedestrian and vehicular circulation paths should be well lighted and provide clear site lines and field of views.
(2) Safe drop-off and pick-up areas should be provided with good separation from other functions.
(3) Fences should be located at appropriate points to separate pedestrian activities from hazardous elements, and to protect individuals or property from attack.
(4) Design of site elements should provide good drainage to prevent ponding or icy conditions.
(5) Entrances and exterior doors should meet appropriate level of security to control unwanted visitors, and reduce risk of threats (key consideration where children are located.)
(6) Correct any issues driven by user welfare or recognized health hazards.

## ■ AESTHETIC / ENVIRONMENT UPGRADES

All facilities require on-going maintenance attention at the current level or better. Preventative maintenance and repair will have a major effect on the appearance, while protecting the physical soundness of the facilities.

The facility should be enhanced by finishes and designs that exemplify the “state-of-the-art” in public accommodations. Finishes of walls should reduce reverberation and echo in event areas, and should add to the focal points. Carpet should support comfortable mobility, without creating resistance to equipment supports (i.e., crutches, canes, wheelchairs, moving AV equipment). Hard floor surfaces should be slip-resistant (0.6 coefficient wet/dry). Ceilings should maximize reflectance. Color contrasts between different surfaces should be distinct between floors, walls, and ceilings. Color should guide the eye from dark to light, to the focal points of events. The lightest areas in the lecture hall should be where speakers, presentations, projected images, and events are positioned. Material selection should also consider durability and maintenance.

The facilities should present an environment that is clean, pleasant, and enhances the activities within the space. Facilities should consider the following conditions:

(1) Well balanced and flexible lighting.
(2) Appropriate color selection and finish materials.
(3) Interior finishes and products adequately installed and maintained. Replace worn, torn, or broken products.

## ■ PERFORMANCE / ENERGY UPGRADES

Beyond Code compliance, aesthetic quality, and nature of the environment, is the performance of the facilities and building systems. Since the installation of many of the building component systems, there have been significant advancements in technology. The design requirements for facilities are at a different standard today, and there is a need to improve the efficiency, where possible, and correct any outdated and obsolete items.

The facilities should operate at an energy efficient level and provide comfortable environment for all users.

An increase in the performance characteristics of several of the buildings' component systems, due to age and condition of existing system or a need to improve efficiency, causes the following upgrades:

(1) Correct deficiencies with regard to extending the life of building systems and components.
(2) Building envelope, lighting, mechanical, and other issues, related to energy conservation, should meet current standards and future concerns.

## ■ PROGRAM REQUIREMENTS AND UPGRADES

As the School District's student population changes and while facilities become older, the adequacy of building organization and spaces become more critical to meeting the current educational program.

The intent of the educational review is to help support the role of the District in determining the scope of any potential changes, improvements, or enhancements to meet both current standards as well as future visions. The following issues are reviewed that will be supportive of the District's Educational Program for the next 20 years:

- Classrooms that meet State Standards for size and functions (provide instructional space that allows several types of teaching and learning activities.
- Current instructional practices require greater hands-on and group activities integrated with technology requiring greater space per school.
- A growing special educational population, coupled with the need for inclusion, requires more space for instruction and support positions.
- The number of meeting spaces for a range of size for conferences, teacher-parent, staff, and other interactions, which are properly located and have privacy.
- Use of technology and presentation space for staff and students (wireless laptops, projection systems, etc.)

- Are there current programs or activities that are located in appropriate rooms or areas due to size, location, or environment?
- Are required features of the learning environment missing, outdated, or not operational?
- Are community needs addressed?
- Review emerging educational offerings and trends.
- Review specialized facilities for Athletics, Performing Arts, or Fine Arts.
- Cafeteria and Food Service functions that meet current standards or desired accommodations.
- Administration and office areas that are adequate for modern educational facilities and provide supportive environment critical for today's population and needs.
- Address student needs that provide opportunities to perform and achieve adequate progress in learning and social development.

## GENERAL DATA

### Bedford Elementary School

| | |
|---|---|
| **Built:** | 1996 |
| **Site:** | 21 acres, located in a residential area with paved drives and parking, and play area. |
| **Structure:** | The School is a partial two-story structure with steel frame, masonry walls, concrete floors, and flat rubber roof. Non-combustible construction in accordance with the International Building Code. |
| **Heating System:** | 2 natural gas, hot water boilers with a chiller for cooling (roof location). |
| **Mechanical System:** | Municipal water and sanitary systems |
| **Electrical Service:** | 480/277 volt; 3-phase; 4-wire; 2000 amp |
| **Systems:** | Fire Alarm<br>Emergency Generator Power System<br>Public Address System<br>Telecommunications System (Wired through High School)<br>Security System<br>Door Access System<br>CCTV System<br>Area of Rescue Assistance |
| **Architectural Area:** | 115,105 SF |
| **PDE Replacement Value:** | $16,056,300 (975 FTE x 92sf = 89,700 x $179/sf = replacement cost)<br>$ 3,211,260 (20% Rule) |
| **PDE Total Capacity:** | 975 |

# PHOTOGRAPHS

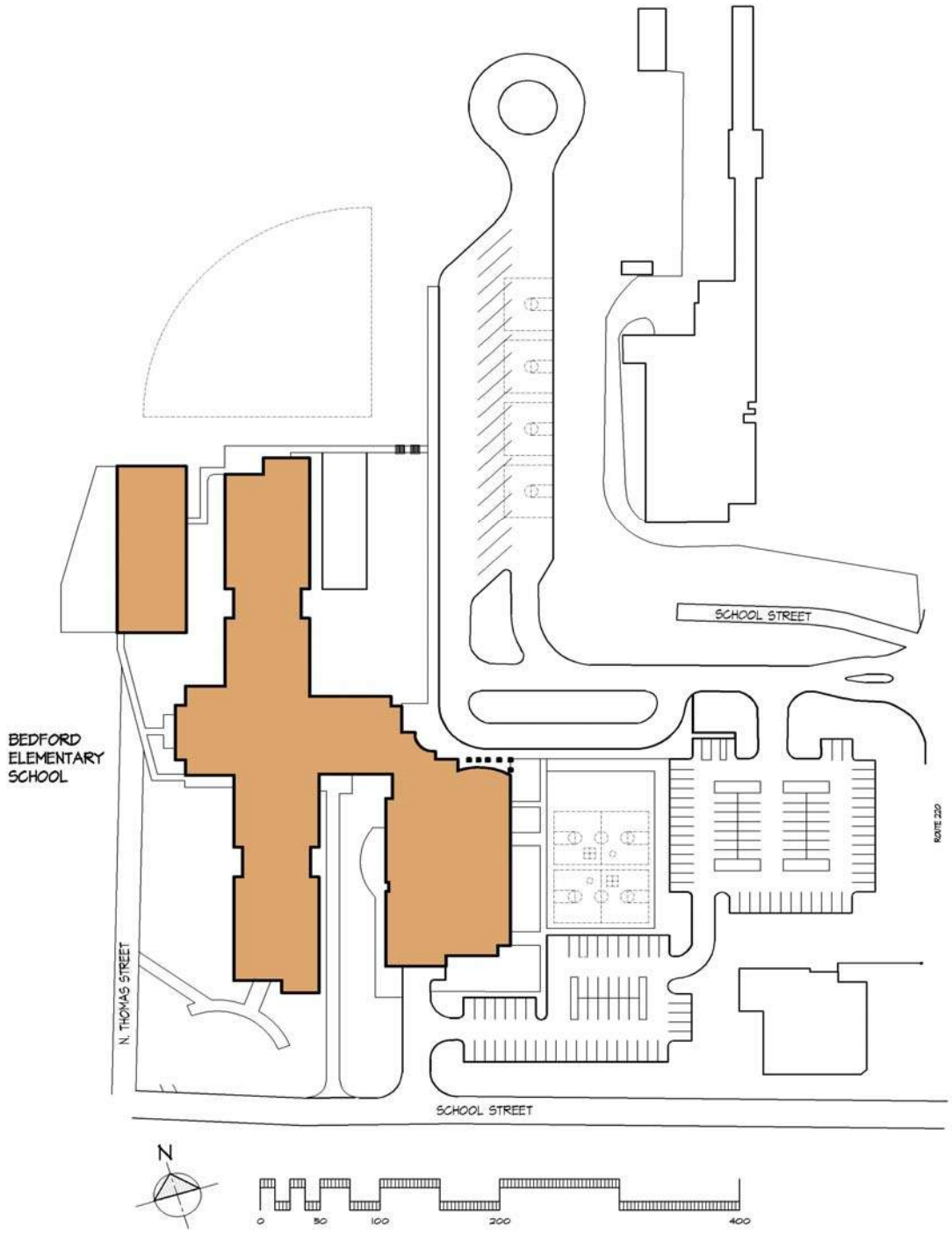
## Bedford Elementary School


## AERIAL VIEW

### Bedford Elementary School

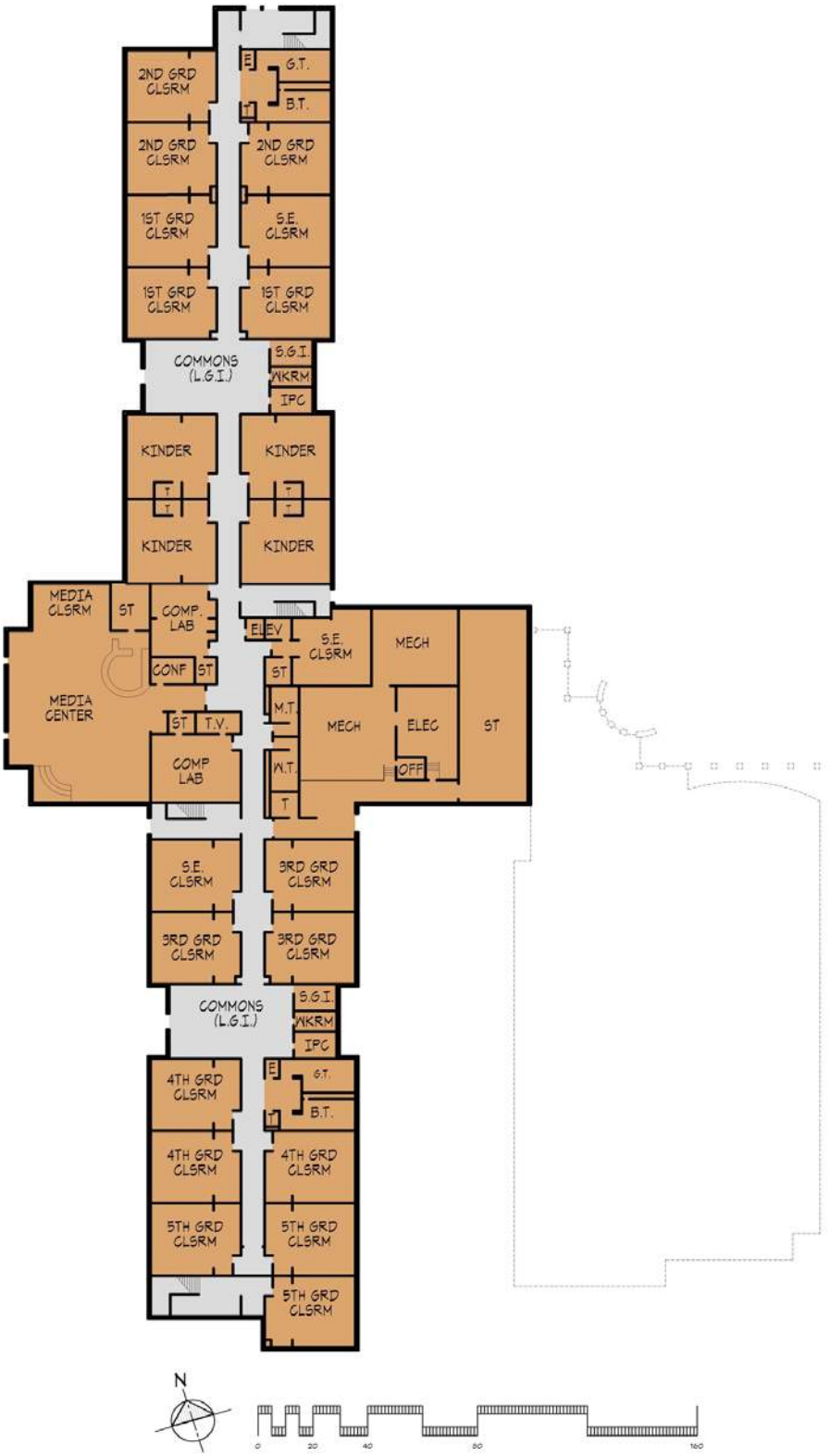
# EXISTING SITE PLAN

## Bedford Elementary School



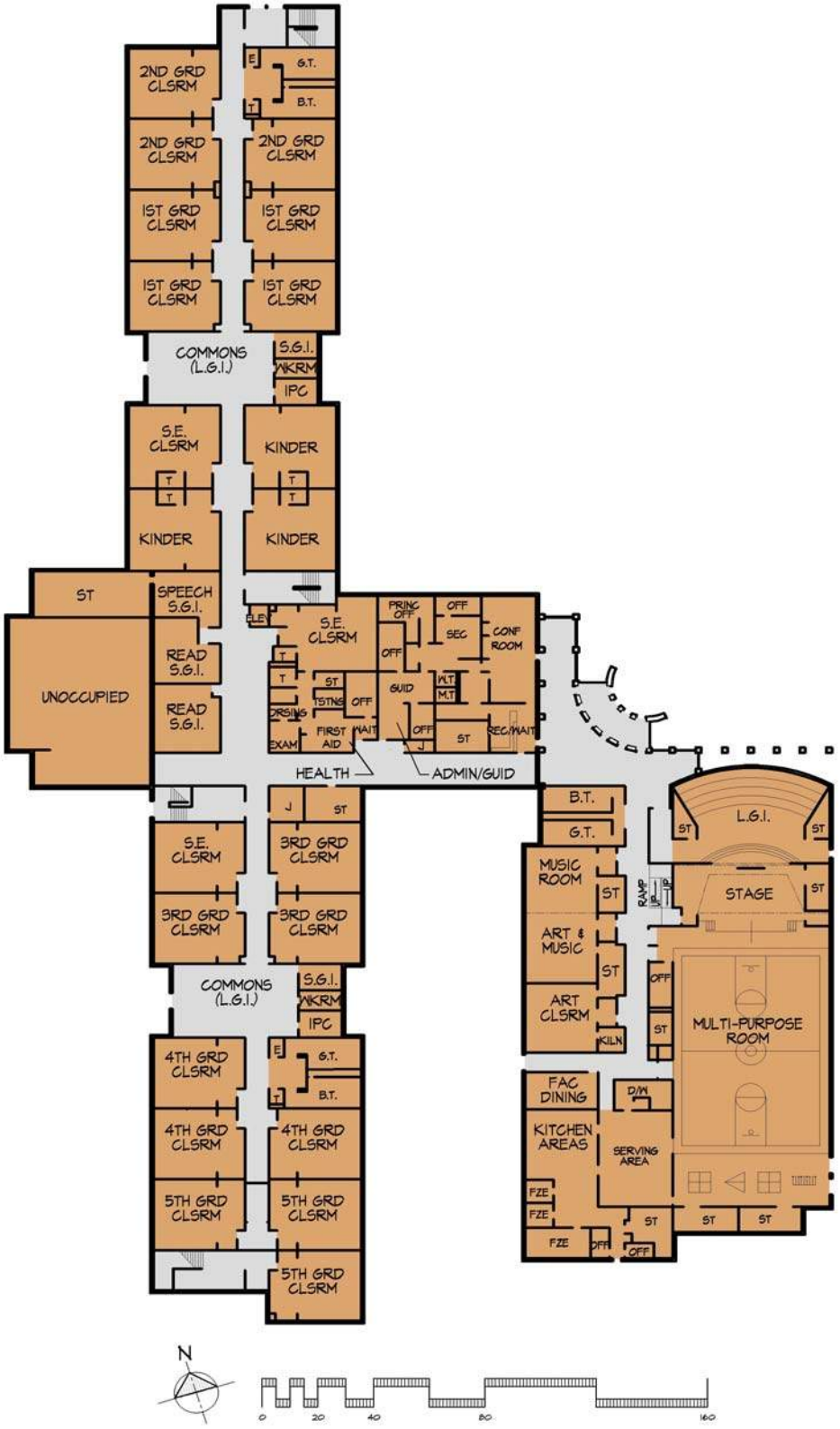
# EXISTING GROUND FLOOR PLAN

## Bedford Elementary School



# EXISTING FIRST FLOOR PLAN

## Bedford Elementary School



# EXISTING K-5 ROOM SCHEDULE

## Bedford Elementary School

| | | K-5 EXISTING | | | | |
|---|---|---|---|---|---|---|
| | | BEDFORD ELEMENTARY | | | | |
| | | No. | Area | Total | District | PDE |
| CLASSROOMS | Kindergarten Full-day | 7 | 925 | 6,475 | 140 | 175 |
| | First Grade | 7 | 845 | 5,915 | 140 | 175 |
| | Second Grade | 6 | 845 | 5,070 | 120 | 150 |
| | Third Grade | 6 | 845 | 5,070 | 138 | 150 |
| | Fourth Grade | 6 | 845 | 5,070 | 138 | 150 |
| | Fifth Grade | 6 | 845 | 5,070 | 138 | 150 |
| SUPPORT | Support Clsrm / Other Use | | | 0 | | |
| | Pre-Kindergarten Classroom | | | 0 | | |
| | Spec Educ Classroom | 6 | 860 | 5,160 | | |
| | S.E. / Gift S.G.I. | 3 | 450 | 1,350 | | |
| | Seminar / S.G.I. | 4 | 150 | 600 | | |
| | Large Group / L.G.I. | 4 | 1,945 | 7,780 | | |
| | Large Group / L.G.I. | 1 | 2,070 | 2,070 | | |
| | Computer Lab | 2 | 890 | 1,780 | | |
| | Art / Music Classroom | 2 | 890 | 1,780 | | |
| | Music Classroom | 1 | 890 | 890 | | |
| ANCILLARY / CORE AREAS | Media Center | 1 | 4,010 | 4,010 | | |
| | Multi-Purpose Room / Gym | 1 | 6,045 | 6,045 | | |
| | Stage / Platform | 1 | 1,670 | 1,670 | | |
| | Kitchen Areas | 1 | 3,310 | 3,310 | | |
| | Administration / Guidance | 1 | 4,115 | 4,115 | | |
| | Health Suite | 1 | 1,170 | 1,170 | | |
| | Faculty Dining / Workroom | 1 | 355 | 355 | | |
| | Faculty / I.P.C. / Office | 8 | 130 | 1,040 | | |
| | CAPACITY | | | | 814 | 950 |
| | SCHEDULED AREA | | | 75,795 | SF | |
| | ARCHITECTURAL AREA | | | 112,135 | SF | |

P.D.E. Capacity: 25 students per classroom.
District Capacity: Grades K-2 = 20 students per classroom; Grades 3-5 = 23 students per classroom.

Elementary Functional Capacity includes Graded Classrooms, while the Total Capacity also includes Support Classrooms that are needed to support the educational program such as Math and Reading. Special Education and Pre-Kindergarten Capacity are not included in the Functional Capacity or Total Capacity.

The Existing adjusted building capacity may have been adjusted to represent the intended or adjusted use of space. The area of existing spaces may be an average of the respective spaces.

## SUMMARY BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

**Bedford Elementary School**

| | | Cost per SF |
|---|---|---|
| SITE EVALUATION | $158,500.00 | $1.38 SF |
| EXTERIOR EVALUATION | $180,000.00 | $1.56 SF |
| INTERIOR EVALUATION | $241,500.00 | $2.10 SF |
| HEATING / VENTILATION EVALUATION | $3,649,600.00 | $31.71 SF |
| PLUMBING EVALUATION | $247,100.00 | $2.15 SF |
| ELECTRICAL EVALUATION | $1,106,100.00 | $9.61 SF |
| CODE EVALUATION | $828,700.00 | $7.20 SF |
| MISCELLANEOUS UPGRADES | $0.00 | $0.00 SF |
| TOTAL BUILDING | $6,411,500.00 | $55.70 SF |

# BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

## Bedford Elementary School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| **A.** | **Site Evaluation:** | |
| *1* | Repair cracking at the bituminous paving, seal, and repaint lines. | $80,300 |
| *2* | Replace the section of settled concrete sidewalk at the north Gymnasium exit door. | $900 |
| *3* | Replace mulch at play areas with ADA rubber play surface. | $74,100 |
| *4* | Repair front sidewalk sunken at edge of HC ramp. | $1,200 |
| *5* | Repair exterior concrete stairs up to upper level at north side of building. | $2,000 |
| | ***Site Evaluation Sub-Total:*** | **$158,500** |
| **B.** | **Exterior of Building Evaluation:** | |
| *1* | Clean brick throughout. | $180,000 |
| | ***Exterior of Building Evaluation Sub-Total:*** | **$180,000** |
| **C.** | **Interior of Building Evaluation:** | |
| *1* | Extend the fuel oil pipe vent that terminates in attic space to the exterior. | $800 |
| *2* | Replace the worn green carpet in the corridor, outside Room 138. | $1,200 |
| *3* | Replace damaged / missing trim at top of folding wall at multi purpose room. | $400 |
| *4* | Install sound batt insulation at ceiling below principals office .(Chiller is below office and causes much noise). | $2,000 |
| *5* | Install new acoustical ceiling tile at classroom alcoves, electrical to provide new lights (dark alcoves presently). | $5,400 |
| *6* | Replace carpets at offices and music rooms. | $16,000 |
| *7* | Install weather-stripping at boiler room exterior door. | $200 |

## Bedford Elementary School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| *8* | Install 6" rubber base at wing walls to Large Group Instruction stage. | $100 |
| *9* | Terrazzo floor patch at corridor next to kitchen. | $400 |
| *10* | Large area under gabled roofs is not insulated and this causes ice dams to form on roof during cold season and leaks t form due to freeze/thaw cycle. Roof shingles are "popping off". High humidity present in area. (See mechanical report.) | $0 |
| *11* | Evidence of high humidity in sagging acoustical tile at lower level C.R. wings. (See mechanical reports). Replace acoustical tile at lower level C.R. wings. | $200,000 |
| *12* | Upgrade security entry (new construction by S.D.) with security window w/ speaker into receptionist area and electronic hardware at front door to control entry into security foyer.etc. | $15,000 |
| | ***Interior of Building Evaluation Sub-Total:*** | **$241,500** |

**D. Heating, Ventilation and Air Conditioning (HVAC) Evaluation:**

| | | |
|---|---|---|
| *1* | Add conditioning/air curtain at main entrance/foyer. | $4,500 |
| *2* | Replace pneumatic system with electronic ATC system. | $345,000 |
| *3* | Replace Boilers with new energy efficient models. | $176,400 |
| *4* | Replace cooling tower new more energy efficient model. | $51,400 |
| *5* | Replace chiller with new energy efficient model, R-410A in lieu of outdated R22, and install for better noise control. | $171,000 |
| *6* | Install a geo-thermal system with ATC to heat and cool the entire building. Include energy recovery units for ventilation. | $2,875,000 |
| *7* | Add dehumidification to lower level. | $22,200 |
| *8* | Add conditioning(split ductless) to MDF's and IDF's. | $4,100 |
| | ***HVAC Evaluation Sub-Total:*** | **$3,649,600** |

# BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

## Bedford Elementary School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| **E.** | **Plumbing Evaluation:** | |
| *1* | Install Low-Flow fixtures for water conservation. | $230,000 |
| *2* | Replace domestic water boiler with new energy efficient model. | $17,100 |
| | ***Plumbing Evaluation Sub-Total:*** | **$247,100** |
| **F.** | **Electrical Evaluation:** | |
| *1* | Install motion detectors and daylight harvesting for energy savings. | $697,500 |
| *2* | Upgrade security system. | $46,000 |
| *3* | Upgrade the existing CCTV system to IP and web accessible and add more cameras for complete building indoor and outdoor coverage. | $86,300 |
| *4* | Upgrade the existing door access system to include additional door coverage. | $57,600 |
| *5* | Replace the multi-purpose room sound system. | $46,000 |
| *6* | Upgrade the data system to category 6 station cabling. | $172,700 |
| | ***Electrical Evaluation Sub-Total:*** | **$1,106,100** |

## Bedford Elementary School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| **G.** | **Code Evaluation:** | |
| | The IBC, Americans with Disabilities Act, and recommendations by the Department of Education require all buildings during the renovation process to be updated to meet current standards and codes. The following building system will need to be updated during the renovation process in order to meet current standards and codes. | |
| | The following items may be required depending on the level of work completed. | |
| *1* | Renovate the Kitchen counter / sink and toilet room at the Environmental Center to meet accessibility code. | $4,300 |
| *2* | The ramp access to the stage is not within the room and therefore, does not meet current code requirements. | $67,500 |
| *3* | Install a curb ramp at the teachers' entrance to meet accessibility code. | $1,200 |
| *4* | Lower the fire extinguisher cabinets to meet accessibility code. | $1,200 |
| *5* | Provide workstations and counters for handicapped in the Nurse's Suite, Administration Office, and Classroom A110. | $55,400 |
| *6* | Upgrade 1 boys' and 1 girls' gang toilet room, per floor, to comply with ADA requirements. | $140,000 |
| *7* | Upgrade 5 individual use toilet rooms to comply with ADA requirements. | $55,000 |
| *8* | Install beveled stair nosing risers at all stair risers. | $6,900 |
| *9* | Add piping insulation packages to exposed piping below lavatories. | $1,700 |
| *10* | Install 5 accessible on-site parking spaces with signage. | $1,800 |
| *11* | Install a fire suppression system.<br>Add a fire pump, piping, and controls, if insulation pressure is available.<br>Add a 20,000 gallon underground storage tank if required. | $493,000 |
| *12* | Provide ADA sink station at art room . | $700 |
| | ***Code Evaluation Sub-Total:*** | **$828,700** |

# BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

## Bedford Elementary School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| **H.** | **Miscellaneous Upgrades:** | |
| *1* | There are no apparent deficiencies. | $0 |
| | ***Miscellaneous Upgrades Sub-Total:*** | **$0** |
| | ***Building Evaluation Total:*** | **$6,411,500** |

## GENERAL DATA

### Bedford Middle School

| | |
|---|---|
| **Built:** | 1978 |
| **Site:** | 21.5 acres, which include athletic fields located across East Watson Street. |
| **Structure:** | The building is a two-story structure, steel frame, masonry walls, concrete floors, and flat rubber roof. Non-combustible construction in accordance with the PA Department of Labor and Industry code. |
| **Heating System:** | Two original, natural gas, hot-water boilers; back-up oil, with chiller. |
| **Mechanical System:** | Municipal water and sanitary systems |
| **Electrical Service:** | 480/277 volt; 3-phase; 4-wire; 1,600 amp |
| **Systems:** | Fire Alarm<br>Emergency Generator Power System<br>Telecommunications System (Wired through the High School)<br>Area of Rescue Assistance System<br>Door Access System<br>CCTV System<br>Security System<br>Public Address/Clock System |
| **Architectural Area:** | 100,765 SF |
| **PDE Replacement Value:** | $15,588,036 (708 FTE x 123sf = 87,084 x $179/sf = replacement cost)<br>$ 3,117,607 (20% Rule) |
| **PDE Total Capacity:** | 708 |

## PHOTOGRAPHS

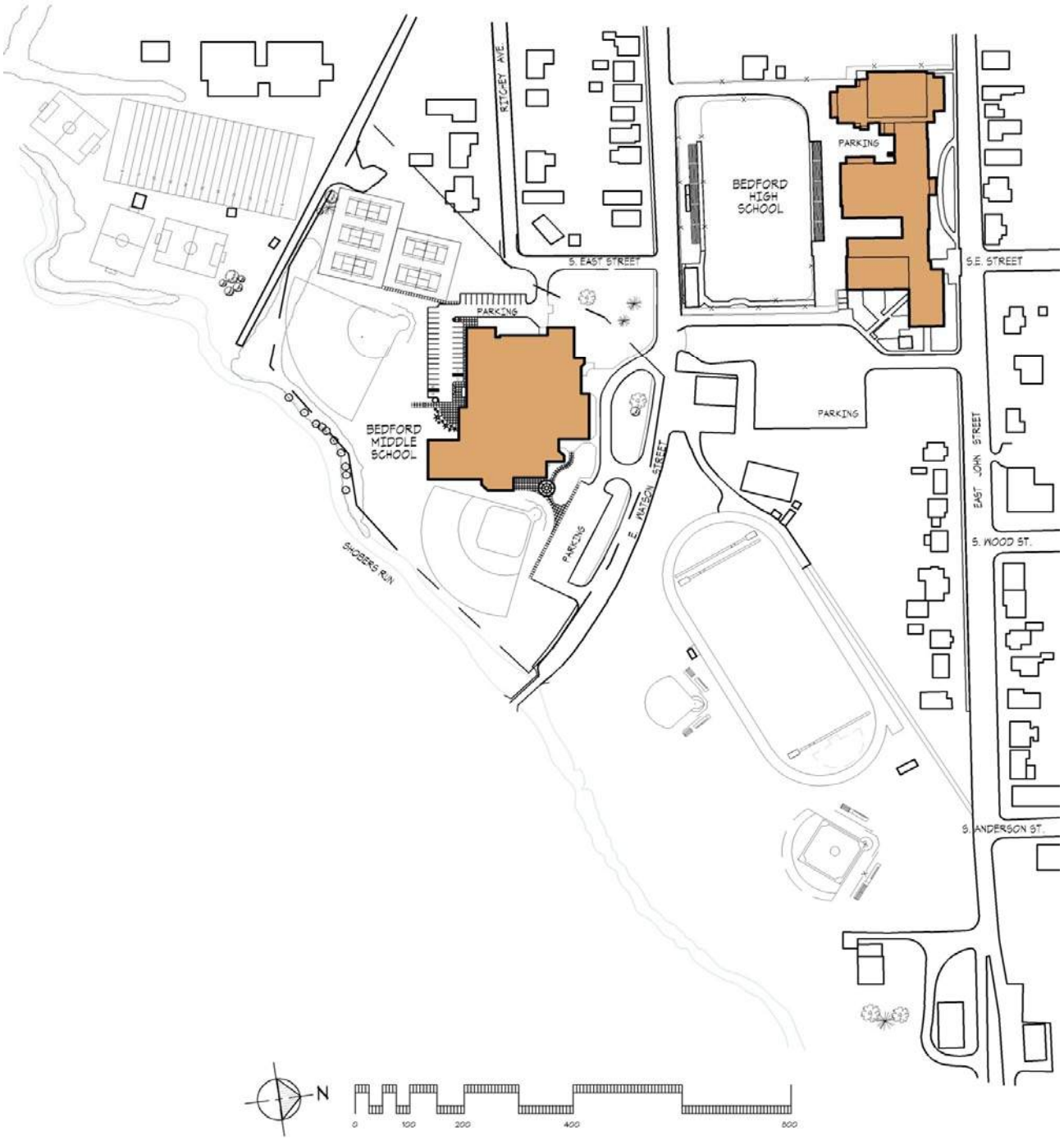
### Bedford Middle School

## AERIAL VIEW

### Bedford Middle School

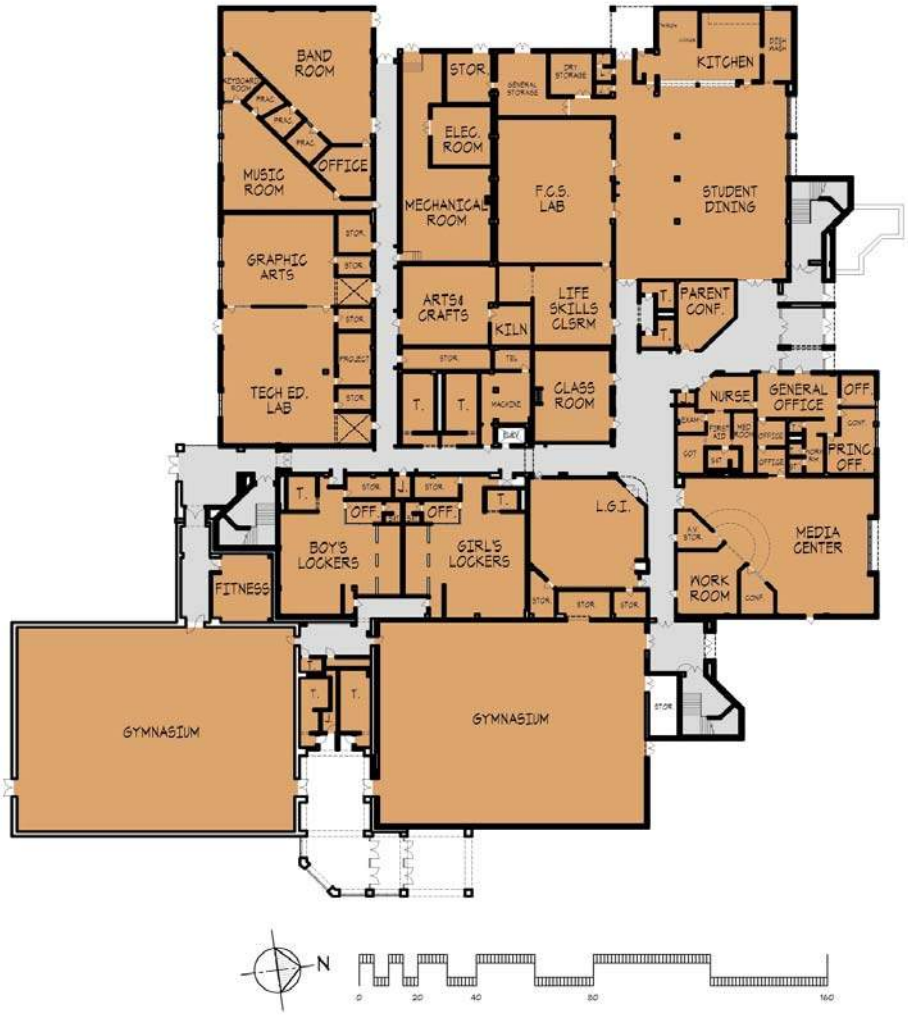
# EXISTING SITE PLAN

## Bedford Middle School



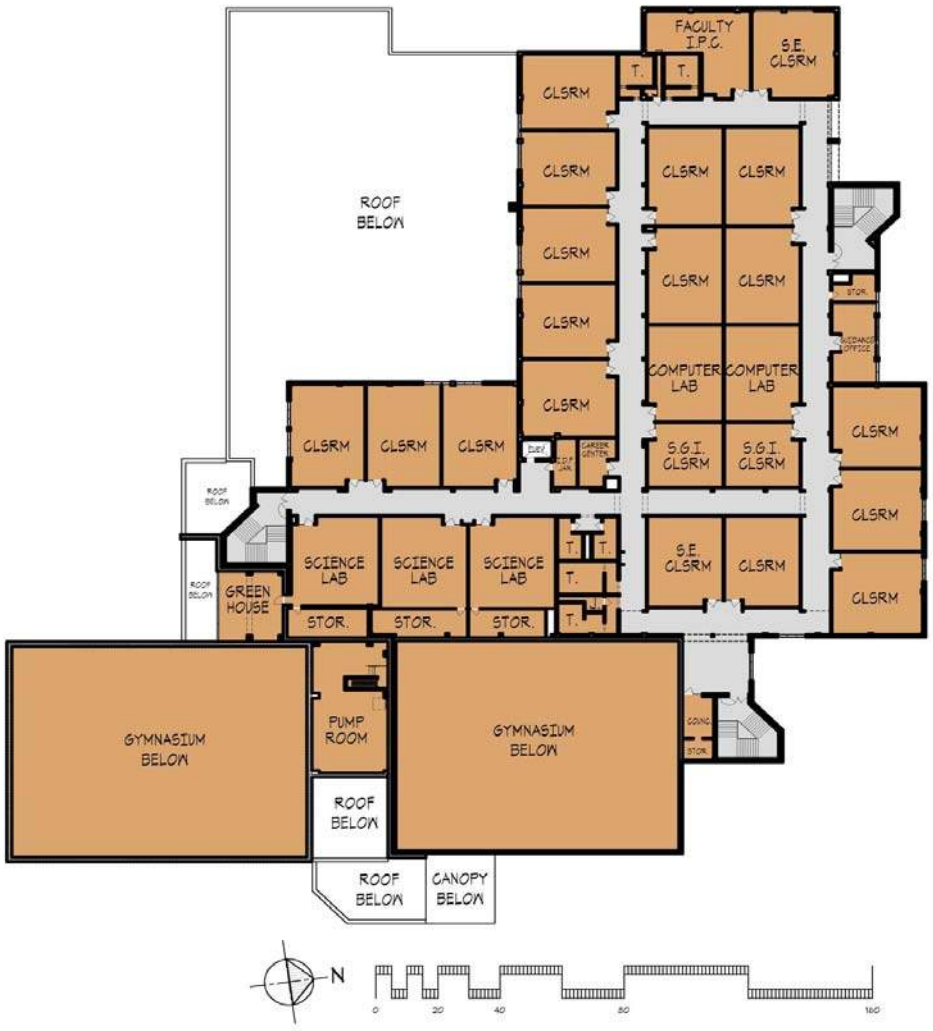
# EXISTING GROUND FLOOR PLAN

## Bedford Middle School



# EXISTING FIRST FLOOR PLAN

## Bedford Middle School



# EXISTING 6-8 ROOM SCHEDULE

## Bedford Middle School

| | | 6-8 EXISTING | | | | | |
|---|---|---|---|---|---|---|---|
| | | BEDFORD MIDDLE SCHOOL | | | | | |
| | | No. | Area | Total | Dist | PDE | |
| CLSRMS | Classroom | 17 | 800 | 13,600 | 425 | 425 | CLSRMS |
| | Science Classroom / Lecture | | | 0 | | | |
| | Science Lab | 3 | 850 | 2,550 | 60 | 60 | |
| SUPPORT | Spec Educ Classroom | 3 | 830 | 2,490 | 75 | | SUPPORT |
| | S.E. Seminar / S.G.I. | | | 0 | | | |
| | Science Proj. Rm. / Greenhouse | 1 | 490 | 490 | | | |
| | Seminar / S.G.I. < 660 s.f. | 2 | 525 | 1,050 | | | |
| | Large Group / L.G.I. | 1 | 1,430 | 1,430 | | | |
| | Computer Lab | 2 | 790 | 1,580 | 40 | 40 | |
| | Music Classroom | 1 | 1,015 | 1,015 | 25 | 25 | |
| | Band / Orchestra / Choral | 1 | 1,710 | 1,710 | 25 | 25 | |
| | Art Classroom | 2 | 1,155 | 2,310 | 40 | 40 | |
| | Family & Consumer Science | 1 | 2,020 | 2,020 | 20 | 20 | |
| | T.E. Lab | 1 | 2,485 | 2,485 | 20 | 20 | |
| ANCILLARY / CORE AREAS | Media Center | 1 | 2,410 | 2,410 | | | ANCILLARY / CORE AREAS |
| | Gymnasium | 1 | 6,550 | 6,550 | 66 | 66 | |
| | Gymnasium | 1 | 6,700 | 6,700 | 66 | 66 | |
| | Fitness Room | 1 | 470 | 470 | | | |
| | Locker Room | 2 | 1,460 | 2,920 | | | |
| | Officials / P.E. Office | 2 | 145 | 290 | | | |
| | Stage / Platform | | | 0 | | | |
| | Student Dining | 1 | 4,110 | 4,110 | | | |
| | Kitchen Areas | 1 | 1,585 | 1,585 | | | |
| | Administration / Guidance | 1 | 2,140 | 2,140 | | | |
| | Health Suite | 1 | 870 | 870 | | | |
| | Faculty Dining / Workroom | 1 | 700 | 700 | | | |
| | Faculty / I.P.C. / Office | 2 | 360 | 720 | | | |
| | CAPACITY | | | | 690 | 708 | |
| | SCHEDULED AREA | | | 62,195 SF | | | |
| | ARCHITECTURAL AREA | | | 157,125 SF | | | |

P.D.E.: 20-25 students per classroom; 90% P.D.E. Utilization Factor and 80% District Utilization Factor.

Secondary Functional Capacity includes all spaces that receive capacity except a Natatorium or District Administration. Special Education Capacity is not included in the Functional Capacity or Total Capacity.

The Existing adjusted building capacity may have been adjusted to represent the intended or adjusted use of space. The area of existing spaces may be an average of the respective spaces.

## SUMMARY BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

**Bedford Middle School**

| | | Cost per SF |
|---|---|---|
| SITE EVALUATION | $281,000.00 | $3.47 SF |
| EXTERIOR EVALUATION | $0.00 | $0.00 SF |
| INTERIOR EVALUATION | $0.00 | $0.00 SF |
| HEATING / VENTILATION EVALUATION | $8,600.00 | $0.11 SF |
| PLUMBING EVALUATION | $0.00 | $0.00 SF |
| ELECTRICAL EVALUATION | $4,200.00 | $0.05 SF |
| CODE EVALUATION | $37,500.00 | $0.46 SF |
| MISCELLANEOUS UPGRADES | $0.00 | $0.00 SF |
| TOTAL BUILDING | $331,300.00 | $4.09 SF |

# BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

## Bedford Middle School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| **A.** | **Site Evaluation:** | |
| *1* | Remove the existing track and install a new surface. | $275,000 |
| *2* | At telephone poles supporting lights around track, secure crossbars and site lights to support poles (6 poles). | $6,000 |
| | ***Site Evaluation Sub-Total:*** | **$281,000** |
| **B.** | **Exterior of Building Evaluation:** | |
| *1* | There are no apparent deficiencies. | $0 |
| | ***Exterior of Building Evaluation Sub-Total:*** | **$0** |
| **C.** | **Interior of Building Evaluation:** | |
| *1* | There are no apparent deficiencies. | $0 |
| | ***Interior of Building Evaluation Sub-Total:*** | **$0** |
| **D.** | **Heating, Ventilation and Air Conditioning (HVAC) Evaluation:** | |
| *1* | Add proper ventilation/conditioning to football uniform storage room. | $8,600 |
| | ***HVAC Evaluation Sub-Total:*** | **$8,600** |
| **E.** | **Plumbing Evaluation:** | |
| *1* | There are no apparent deficiencies. | $0 |
| | ***Plumbing Evaluation Sub-Total:*** | **$0** |

# BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

## Bedford Middle School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| **F.** | **Electrical Evaluation:** | |
| *1* | Add CCTV cameras to the existing system for more coverage. | $4,200 |
| | ***Electrical Evaluation Sub-Total:*** | **$4,200** |
| **G.** | **Code Evaluation:** | |
| | The IBC, Americans with Disabilities Act, and recommendations by the Department of Education require all buildings during the renovation process to be updated to meet current standards and codes. The following building system will need to be updated during the renovation process in order to meet current standards and codes. | |
| | The following items may be required depending on the level of work completed. | |
| *1* | Upgrade gang toilets to comply with current ADA codes. | $30,000 |
| *2* | Upgrade all individual HC accessible individual use toilet rooms to comply with current ADA code. | $7,500 |
| | ***Code Evaluation Sub-Total:*** | **$37,500** |
| **H.** | **Miscellaneous Upgrades:** | |
| *1* | There are no apparent deficiencies. | $0 |
| | ***Miscellaneous Upgrades Sub-Total:*** | **$0** |
| | ***Building Evaluation Total:*** | **$331,300** |

## GENERAL DATA

### Bedford High School

| | |
|---|---|
| **Built:** | 1888, with additions in 1927, 1934, 1946, 1954, and 1996. |
| **Site:** | 3.5 acres, located in a residential area with paved drives and parking, and football field with bleachers, concession stand, and press box. |
| **Structure:** | The building is a three-story structure with partial basement; wood and steel frame; masonry walls; concrete floors; and a flat rubber roof with a partial imitation slate gabled roof. |
| **Heating System:** | 2 natural gas, hot water boilers with #2 fuel oil backup, and chiller for cooling. |
| **Mechanical System:** | Municipal water and sanitary systems |
| **Electrical Service:** | 480/277 volt; 3-phase; 4-wire; 2,500 amp |
| **Systems:** | Fire Alarm<br>Emergency Generator Power System<br>Telecommunications System (Main District Demarc)<br>Area of Rescue Assistance System<br>Door Access System<br>CCTV System<br>Security System<br>Public Address/Clock System |
| **Architectural Area:** | 177,390 SF |
| **PDE Replacement Value:** | $16,336,614 (742 FTE x 123sf =91,266 x $179/sf = replacement cost)<br>$ 3,267,323 (20% Rule) |
| **PDE Total Capacity:** | 724 (742 with DAO) |

# PHOTOGRAPHS

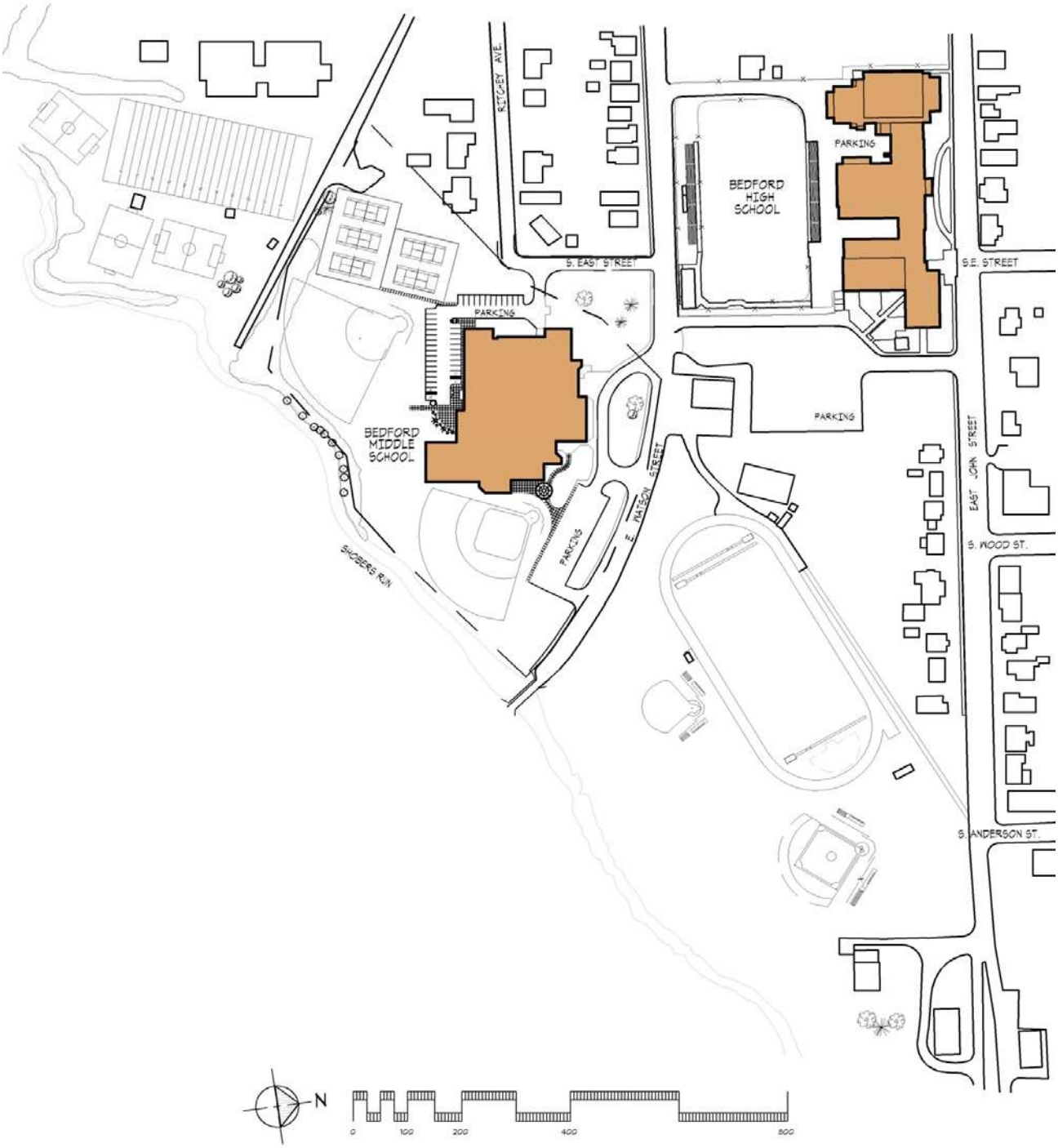
## Bedford High School


# AERIAL VIEW

## Bedford High School

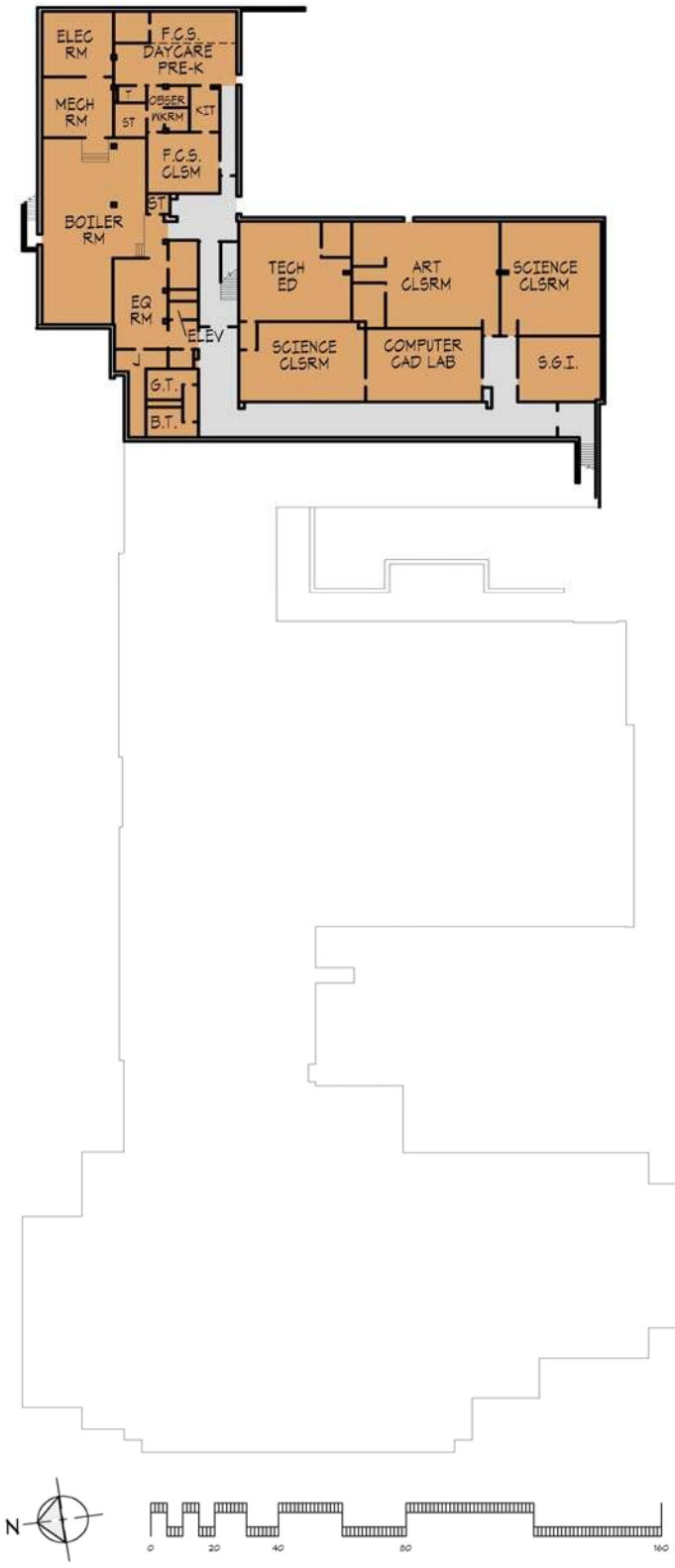
# EXISTING SITE PLAN

## Bedford High School



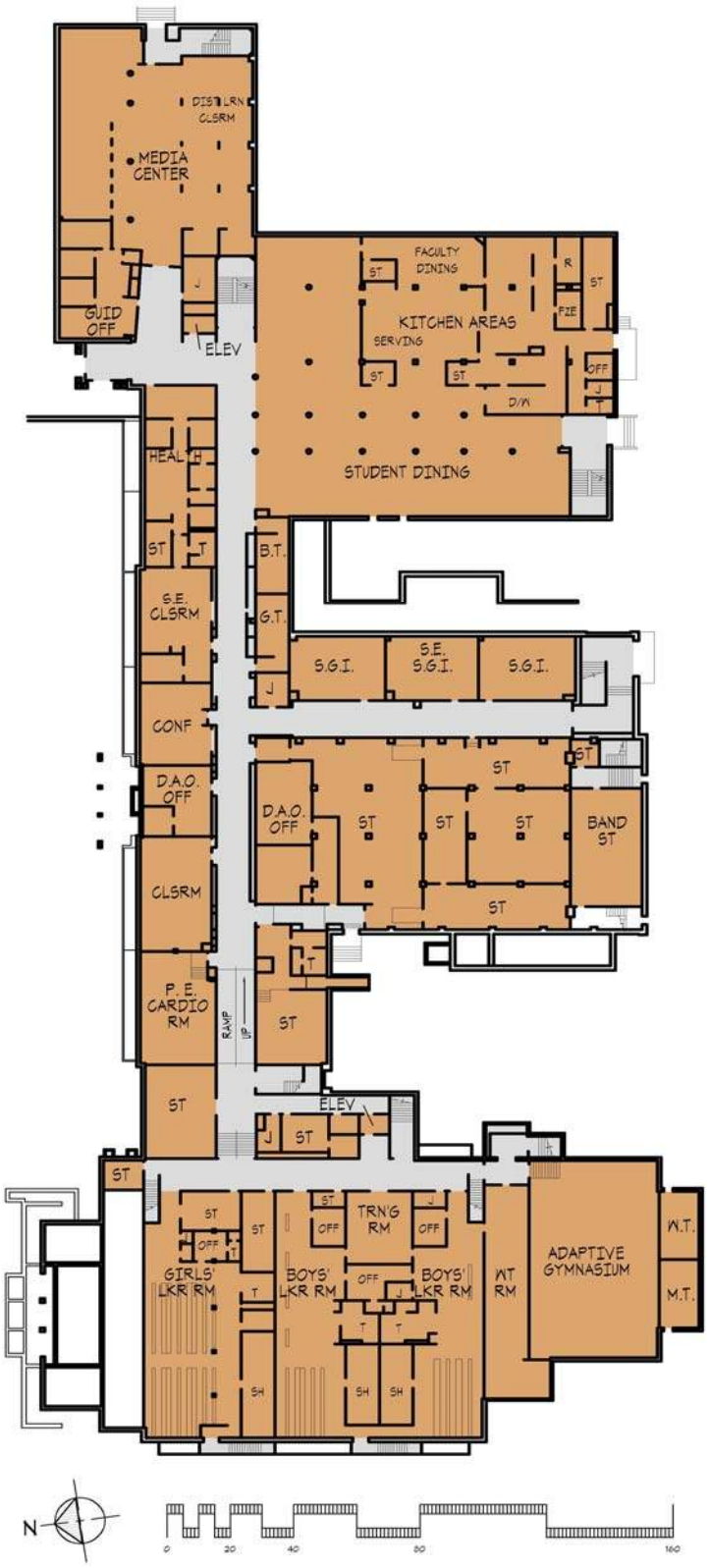
# EXISTING GROUND FLOOR PLAN

## Bedford High School



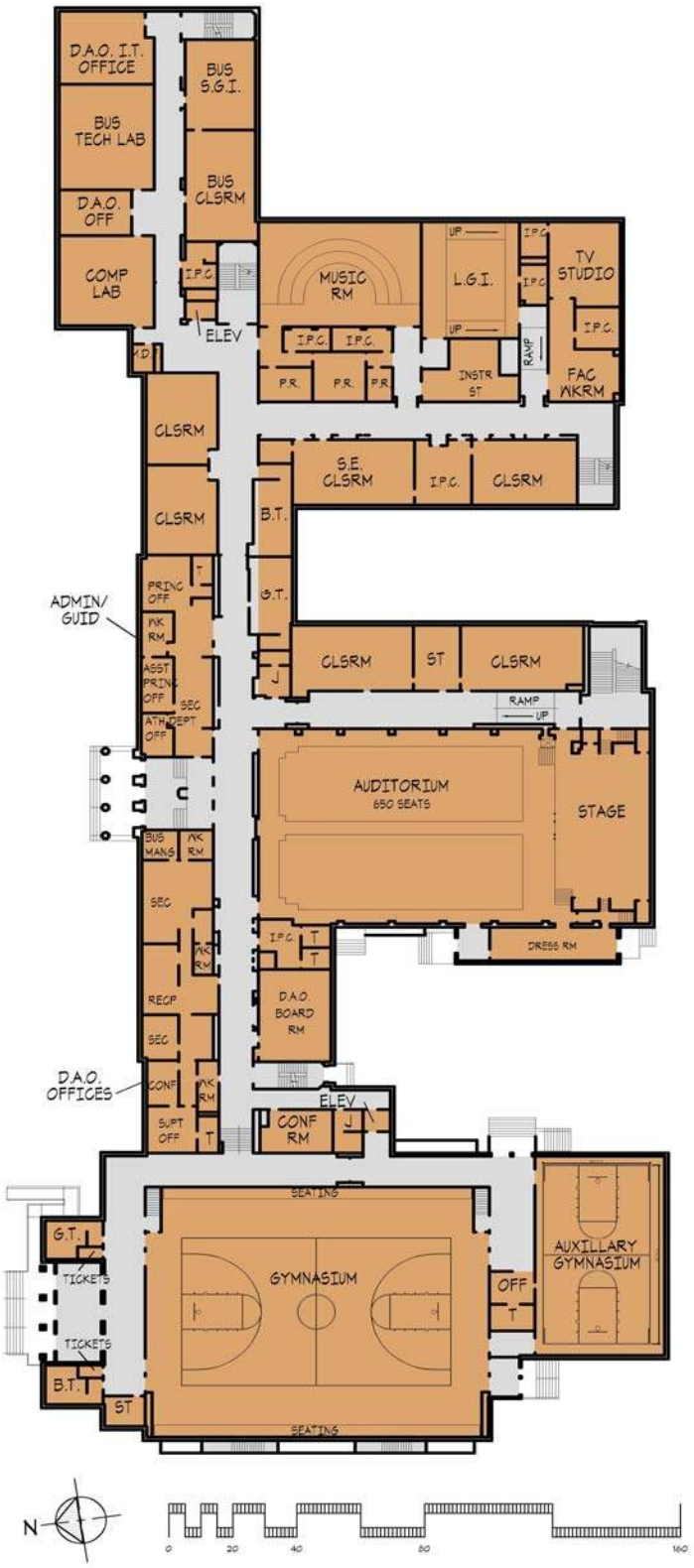
# EXISTING FIRST FLOOR PLAN

## Bedford High School



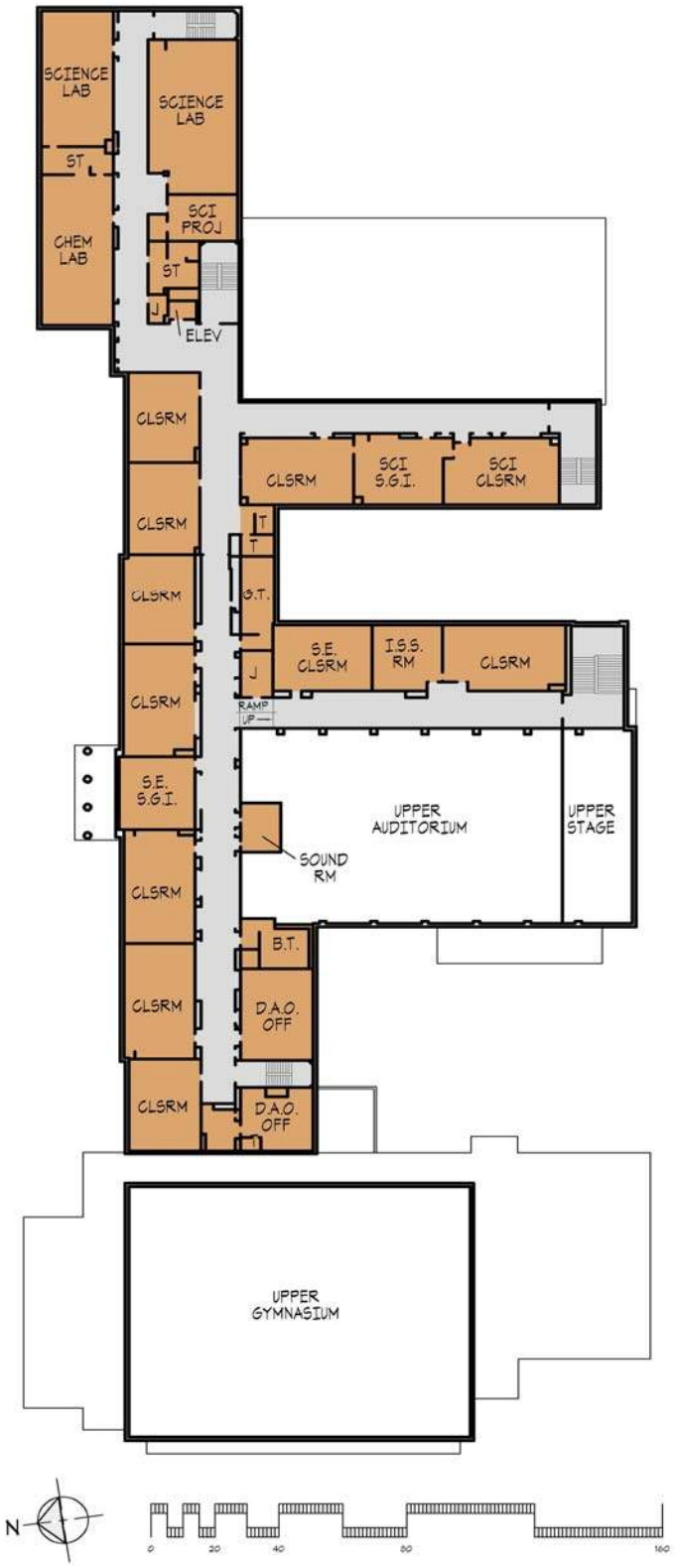
# EXISTING SECOND FLOOR PLAN

## Bedford High School



# EXISTING THIRD FLOOR PLAN

## Bedford High School



# EXISTING 9-12 ROOM SCHEDULE

## Bedford High School

| | 9-12 EXISTING | | | | |
|---|---|---|---|---|---|
| | **BEDFORD HIGH SCHOOL** | | | | |
| | No. | Area | Total | Dist | PDE |
| **Gymnasium** | 1 | 8,700 | 8,700 | 66 | 66 |
| **Auxiliary Gymnasium** | 1 | 2,700 | 2,700 | 33 | 33 |
| **Adaptive Gymnasium** | 1 | 2,700 | 2,700 | | |
| **Locker Room / Team Room** | 3 | 2,300 | 6,900 | | |
| **Weight / Wrestling / Cardio Rm** | 2 | 965 | 1,930 | | |
| **Training Room** | 1 | 505 | 505 | | |
| **P.E. / Coach Office** | 5 | 150 | 750 | | |
| **P.E. / Athletic I.P.C.** | 1 | 690 | 690 | | |
| **Tickets / Concession** | 2 | 35 | 70 | | |
| **Reg Clsrm 660+ SF** | 15 | 760 | 11,400 | 375 | 375 |
| **Reg Clsrm < 660 SF** | 3 | 640 | 1,920 | | |
| **Science Classroom** | 3 | 980 | 2,940 | 75 | 75 |
| **Science < 660 SF** | 1 | 640 | 640 | | |
| **Science Proj Rm / Greenhouse** | 1 | 380 | 380 | | |
| **Science Lab** | 3 | 1,240 | 3,720 | 60 | 60 |
| **Special Education Clsrm.** | 4 | 755 | 3,020 | | |
| **Spec. Educ. Seminar / S.G.I.** | 1 | 575 | 575 | | |
| **S.G.I. / Student Activity** | 1 | 560 | 560 | | |
| **Large Group Instruction** | 1 | 1,140 | 1,140 | | |
| **Business Clsrm** | 1 | 800 | 800 | 25 | 25 |
| **Business Lab** | 2 | 945 | 1,890 | 40 | 40 |
| **Computer Lab (CAD)** | 1 | 875 | 875 | 20 | 20 |
| **T.V. Studio S.G.I.** | 1 | 600 | 600 | | |
| **Art Classroom** | 1 | 1,645 | 1,645 | 20 | 20 |
| **Music Classroom** | 1 | 1,745 | 1,745 | 25 | 25 |
| **Family & Consumer Science** | 1 | 1,930 | 1,930 | 20 | 20 |
| **TE Shop <1800 sf** | 1 | 1,175 | 1,175 | | |
| **Media Center** | 1 | 4,120 | 4,120 | | |
| **Stage / Platform** | 1 | 1,780 | 1,780 | | |
| **Auditorium** | 1 | 6,000 | 6,000 | | |
| **Student Dining** | 1 | 5,830 | 5,830 | | |
| **Kitchen Areas** | 1 | 3,600 | 3,600 | | |
| **Administration / Guidance** | 1 | 2,825 | 2,825 | | |
| **Health Suite** | 1 | 1,350 | 1,350 | | |
| **Faculty Dining / Workroom** | 2 | 500 | 1,000 | | |
| **Faculty / I.P.C. / Office** | 8 | 165 | 1,320 | | |
| **District Administration Offices** | 1 | 7,315 | 7,315 | 18 | 18 |
| **FUNCTIONAL CAPACITY** | | | | 607 | 683 |
| **TOTAL CAPACITY** | | | | 625 | 701 |
| **ARCHITECTURAL AREA** | | | 50,205 SF | | |

P.D.E.: 20-25 students per classroom; 90% P.D.E. Utilization Factor and 80% District Utilization Factor.

Secondary Functional Capacity includes all spaces that receive capacity except a Natatorium or District Administration. Special Education Capacity is not included in the Functional Capacity or Total Capacity.

The Existing adjusted building capacity may have been adjusted to represent the intended or adjusted use of space. The area of existing spaces may be an average of the respective spaces.

## SUMMARY BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

**Bedford High School**

| | | Cost per SF |
|---|---|---|
| SITE EVALUATION | $1,148,200.00 | $6.47 SF |
| EXTERIOR EVALUATION | $2,135,000.00 | $12.04 SF |
| INTERIOR EVALUATION | $3,141,500.00 | $17.71 SF |
| HEATING / VENTILATION EVALUATION | $4,800,000.00 | $27.06 SF |
| PLUMBING EVALUATION | $1,259,400.00 | $7.10 SF |
| ELECTRICAL EVALUATION | $5,169,000.00 | $29.14 SF |
| CODE EVALUATION | $2,077,900.00 | $11.71 SF |
| MISCELLANEOUS UPGRADES | $0.00 | $0.00 SF |
| TOTAL BUILDING | $19,731,000.00 | $111.23 SF |

# BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

## Bedford High School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| **A.** | **Site Evaluation:** | |
| *1* | Seed lawn area in the Cafeteria Courtyard. | $400 |
| *2* | Replace cracked and spalled concrete curb at the student parking lot. | $2,100 |
| *3* | Sand rusted areas of the child care fence and paint. | $500 |
| *4* | Repair cracked bituminous paving, overlay existing paving, and paint lines. | $400,000 |
| *5* | Install bollards at exterior masonry corners of gymnasium and exterior toilet wing. | $7,200 |
| *6* | Regrade, re-seed and place new topsoil on the football field,(Allowance) (Current topographical plan and further study required). | $200,000 |
| *7* | Install new bleachers at both sides of H.S. stadium (1st row seating on raised platform/ADA) , (2200 seats total capacity). | $451,000 |
| *8* | Add irrigation system @ high school stadium field.(See plumbing report). | $0 |
| *9* | At concessions building at the H.S. field :<br>repair masonry cracks and joints around all door frames . | $2,000 |
| *10* | At concessions building at the H.S. field :<br>repair settlement of east end of building (allowance). | $60,000 |
| *11* | Repair cracks in stone retaining wall at H.S. field.(allowance).This will be affected by the proposed re-grading of the H.S. field . | $15,000 |
| *12* | Place filter fabric and stone at unmowable slope at end of H.S. field. | $10,000 |
| | ***Site Evaluation Sub-Total:*** | **$1,148,200** |

# BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

## Bedford High School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| **B.** | **Exterior of Building Evaluation:** | |
| *1* | Paint soffits over the east Library and dock doors. | $500 |
| *2* | Caulk cracked brick above ticket booth roof, south Gymnasium wall. | $400 |
| *3* | Clean and repoint patches of older brick throughout rear of building (1,000 s.f. allowance). | $25,000 |
| *4* | Repair cracks in masonry at S.E. corner of Aux. Gym and gym. | $1,200 |
| *5* | Rust treat ,sand and refinish downspout boot at S.W. corner of Gym wing. | $600 |
| *6* | Repair exterior concrete stair nosings at end of library wing. | $2,000 |
| *7* | Repair cracked low concrete wall and replace chain link fence above it along driveway at west end of the stadium . | $24,000 |
| *8* | Clean and repoint limestone cornices on building face and cast stone wall caps on low walls throughout the H.S. building. | $28,800 |
| *9* | Secure, reattach and repaint wood cupola at roof of H.S. | $20,000 |
| *10* | Repair drainage/erosion hole in grade at east side of the middle entry into front of H.S. | $3,500 |
| *11* | Replace all flat roofs (except roof over auditorium) with 30 year/ rubber/adhered roofs. Gabled roofs to be replaced with new faux-slate shingles. | $994,000 |
| *12* | Remove and replace "bowing" parapet walls above cornice and roof at westernmost front entrance portico. | $44,800 |
| *13* | Clean brick throughout. | $180,200 |
| *14* | Replace exterior doors and hardware throughout. | $350,000 |
| *15* | Replace windows throughout. | $460,000 |
| | ***Exterior of Building Evaluation Sub-Total:*** | **$2,135,000** |

# BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

## Bedford High School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| **C.** | **Interior of Building Evaluation:** | |
| *1* | Remove the industrial dust collector at the overflow Art Room and repair and paint wall to match the existing adjacent surfaces. | $3,500 |
| *2* | Remove and replace the acoustical tile ceiling in the overflow Art Room. | $3,100 |
| *3* | Install an acoustical tile ceiling at the Athletic Department's storage room. | $4,000 |
| *4* | Add a chair lift to the Fitness Room. | $45,000 |
| *5* | Repair/replace the damaged wainscot wall panels of the north wall in the Auxiliary Gymnasium. | $4,600 |
| *6* | At the boys' locker room, replace the missing, glazed block at the doorway of the gang shower. | $1,700 |
| *7* | Replace the carpet and acoustical tile ceiling, and repair plaster walls and paint in the Dressing Room. | $6,900 |
| *8* | Paint the vestibule, adjacent to the Dressing Room. | $500 |
| *9* | Repair the cracked terrazzo floors at the Gymnasium Lobby. | $2,800 |
| *10* | Repair the plaster at the exterior of the third floor Classroom and paint to match existing surfaces. | $400 |
| *11* | Re-key the entire building for security. | $41,700 |
| *12* | Install 6" rubber base at 1st floor corridor serving the locker rooms. | $300 |
| *13* | Repair crack at corner of wing wall at north side of showers at boys locker room. | $300 |
| *14* | Replace library carpet. | $18,000 |
| *15* | Replace drywall at 2nd floor corridor with 3/4" impact resistant drywall (where locker banks were filled in) | $25,000 |
| *16* | Build a permanent wood stage platform extension with lockable storage area beneath.(presently a temporary stage extension exists). | $25,000 |

# BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

## Bedford High School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| *17* | replace VCT floor tile with BCT throughout. | $324,000 |
| *18* | Replace ticket booth windows at two ticket booths in gym lobby entrance. | $900 |
| *19* | Replace ceilings throughout. Accommodate new lighting and mechanical work. | $720,000 |
| *20* | New painting throughout all walls. | $354,000 |
| *21* | New rubber treads and risers (all interior stairs). | $22,000 |
| *22* | Replace stage curtains and rigging. | $28,000 |
| *23* | Kitchen Equipment (allowance). | $200,000 |
| *24* | Replace lockers . | $280,000 |
| *25* | Replace casework throughout. . | $729,800 |
| *26* | Replace carpet with carpet tiles throughout. | $300,000 |
| | ***Interior of Building Evaluation Sub-Total:*** | **$3,141,500** |

**D. Heating, Ventilation and Air Conditioning (HVAC) Evaluation:**

| | | |
|---|---|---|
| *1* | Add ventilation/exhaust to technology classroom. | $32,400 |
| *2* | Replace pneumatic system with electronic ATC system. | $531,000 |
| *3* | Replace Boilers with new energy efficient models. | $306,000 |
| *4* | Replace cooling tower new more energy efficient model. | $51,400 |
| *5* | Replace chiller with new energy efficient model, R-410A in lieu of outdated R-22, and install for better noise control. | $171,000 |
| *6* | Add proper controls to better condition the administration area. | $4,500 |
| *7* | Add proper ventilation and air conditioning to auxiliary gym. | $24,300 |

## Bedford High School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| *8* | Add proper ventilation/conditioning to football uniform drying room. | $8,600 |
| *9* | Extend Existing System as necessary for renovations/additions | $840,000 |
| *10* | Install a traditional WSHP system with ATC to heat and cool the entire building w/ addition. Include energy recovery units for ventilation. | $4,176,300 |
| *11* | Install a geo-thermal system with ATC to heat and cool the entire building w/ addition. Include energy recovery units for ventilation. | $4,800,000 |
| | ***HVAC Evaluation Sub-Total(BASE-1):*** | **$1,969,200** |
| | ***HVAC Evaluation Sub-Total(BASE LEED-2):*** | **$4,176,300** |
| | ***HVAC Evaluation Sub-Total(GEOTHERMAL-3):*** | **$4,800,000** |
| | ***HVAC Evaluation Sub-Total(COMPLETE REPLACEMENT-4):*** | **$4,800,000** |

**E. Plumbing Evaluation:**

| | | |
|---|---|---|
| *1* | The sewer line clogs and backs-up into the Physics Room at the basement | $10,000 |
| *2* | Install Low-Flow fixtures for water conservation. | $384,000 |
| *3* | Replace domestic water boiler with new energy efficient model. | $44,400 |
| *4* | Extend Existing System as necessary for renovations/additions | $126,000 |
| *5* | Replace domestic water and DWV piping w/ addition | $634,000 |
| *6* | Replace storm and natural gas piping w/ addition | $171,000 |
| *7* | Install irrigation system in football field | $26,000 |
| | ***Plumbing Evaluation Sub-Total(BASE-1):*** | **$162,000** |
| | ***Plumbing Evaluation Sub-Total(BASE LEED-2):*** | **$590,400** |
| | ***Plumbing Evaluation Sub-Total(BASE GEOTHERMAL-3):*** | **$590,400** |
| | ***Plumbing Evaluation Sub-Total(COMPLETE REPLACEMENT-4):*** | **$1,259,400** |

# BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

## Bedford High School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| **F.** | **Electrical Evaluation:** | |
| *1* | Replace the public address and clock systems. | $151,000 |
| *2* | Replace interior and exterior lighting systems with energy efficient motion sensor control and daylight harvesting. | $1,430,000 |
| *3* | Replace auditorium sound system. | $81,000 |
| *4* | Add cafeteria sound system. | $28,000 |
| *5* | Replace auditorium performance lighting system. | $355,000 |
| *6* | Replace cable TV and multi-media system. | $132,000 |
| *7* | Replace stadium lighting on the soccer field/track. | $200,000 |
| *8* | Update data system with category 6 station cabling/equipment. | $267,000 |
| *9* | Extend existing systems as necessary for renovations/additions | $414,000 |
| *10* | Replace/upgrade power system and switchgear w/ addition | $2,250,000 |
| *11* | Replace/upgrade fire alarm system w/ addition | $160,000 |
| *12* | Replace/upgrade access control system w/ addition | $65,000 |
| *13* | Replace/upgrade security system w/ addition | $50,000 |
| | ***Electrical Evaluation Sub-Total(BASE-1):*** | **$3,058,000** |
| | ***Electrical Evaluation Sub-Total(BASE LEED-2):*** | **$4,894,000** |
| | ***Electrical Evaluation Sub-Total(GEOTHERMAL-3):*** | **$4,894,000** |
| | ***Electrical Evaluation Sub-Total(COMPLETE REPLACEMENT-4):*** | **$5,169,000** |

# BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

## Bedford High School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| **G.** | **Code Evaluation:** | |
| | The IBC, Americans with Disabilities Act, and recommendations by the Department of Education require all buildings during the renovation process to be updated to meet current standards and codes. The following building system will need to be updated during the renovation process in order to meet current standards and codes. | |
| | The following items may be required depending on the level of work completed. | |
| *1* | Install an accessible sink at the Concession Stand. | $600 |
| *2* | Renovate one Concession Stand counter to meet code. | $600 |
| *3* | Install beveled stair nosing at all risers. | $29,700 |
| *4* | Install ADA compliant student lockers. | $11,300 |
| *5* | Replace glass in Classroom doors, corridor doors, transoms, and display cases with safety glass. | $9,000 |
| *6* | Provide workstations and counters with sink for handicapped in the General Office, Library, Art, Science, Family and Consumer Science, Drafting, CAD Lab, Technology, Physics, Industrial Arts, Health Suite, Faculty Room, Training, etc. to meet code. | $48,300 |
| *7* | Upgrade one sink in rooms with cabinet sink(s) to ADA standards. | $42,000 |
| *8* | Provide an ADA compliant eyewash and shower at the Chemistry Classroom. | $900 |
| *9* | Upgrade all individual use toilet rooms to comply with ADA requirements. | $110,000 |
| *10* | Upgrade the girls', boys', locker rooms and team Locker Rooms to meet accessibility code requirements for benches. | $50,000 |
| *11* | Add handrails at all stairs to meet 5'-0" O.C. code requirements. | $92,000 |
| *12* | Renovate the outside gang toilets at the football field to meet accessibility standards. | $23,000 |
| *13* | Add piping insulation packages to exposed piping below lavatories. | $1,800 |

# BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

## Bedford High School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| *14* | Install a backflow preventer on the incoming domestic water line. | $6,000 |
| *15* | Install new Gymnasium bleachers to meet accessibility code. | $175,000 |
| *16* | Install 5 accessible on-site parking spaces with signage. | $1,700 |
| *17* | Install a fire suppression system.<br>Add a fire pump, piping, and controls, if insulation pressure is available.<br>Add a 20,000 gallon underground storage tank if required. | $760,000 |
| *18* | Apply for variance not to provide ADA access to press box per code. | $1,000 |
| *19* | Replace all presently mulched play areas at child care court with ADA approved interlocking rubber tiles.(2.5" thickness) | $13,000 |
| *20* | Replace guard rails and concrete curbs at all areaways at west end of gym wing, per code/condition. | $64,500 |
| *21* | Make auditorium control booth ADA accessible. | $5,000 |
| *22* | Create code compliant alcoves for doors to open to corridor without swinging entirely into corridor.(10 alcoves/doors) | $60,000 |
| *23* | Add two sets of rated double doors; one at hall entrance into each "dead end corridor" leading to the west elevator on the 1st and 2nd floor.(two sets of double doors total). | $6,000 |
| *24* | Replace 1 pair of double doors into 'business wing' hallway at 2nd floor (easternmost wing) with double egress doors per code to prevent "dead end corridor". | $3,500 |
| *25* | Misc. work at all gang bathrooms to comply with ADA. | $221,000 |
| *26* | Upgrade elevators (2) to comply w/ latest ADA codes.(Allowance). | $40,000 |
| *27* | Provide ADA seating at auditorium . | $12,000 |
| *28* | Replace interior doors with properly rated doors and code /rated hardware per codes. | $290,000 |
| | ***Code Evaluation Sub-Total:*** | **$2,077,900** |

# BUILDING IMPROVEMENTS AND CONSTRUCTION COSTS

## Bedford High School

| ARCHITECTURAL SURVEY | | Cost |
|---|---|---|
| **H.** | **Miscellaneous Upgrades:** | |
| *1* | There are no apparent deficiencies. | $0 |
| | ***Miscellaneous Upgrades Sub-Total:*** | **$0** |
| | ***Building Evaluation Total:*** | **$13,691,800** |

# INTRODUCTION TO OPTION EXPLORATION

This section of the Feasibility Study is an overview of the Proposed Options. Each Option includes the following information: Option Summary; Option Cost Summary; Student Enrollment / Capacity Evaluation; Proposed Educational Program; Proposed Elementary and Secondary Room Schedules; and Projected Reimbursement.

The following Options were developed during meetings with the Bedford Area School District's District Administration and EI Associates. These Options are provided for the Board of Education to evaluate the needs of the District's facilities. The Options are evaluated using the same information, programming, and facility needs for each Option, in order to compare the cost of each Option on an equal basis.

While the information provided for each facility is for the purpose of the Board of Education to review and evaluate the necessary repair to each building, for the purpose of Option comparison, the entire cost of each facility's improvements has been included as renovation costs. This cost can be refined in meetings held at a later time with the District, when reviewing the actual materials that would be utilized in the construction project.

School Districts should understand that the Pennsylvania Department of Education will provide an additional 10% reimbursement for renovating existing buildings; also an additional 10% reimbursement for obtaining a minimum of Silver Certification from the U.S. Green Building Council's Leadership in Energy and Environmental Design Green Building Rating System (LEED-NC) for high performance and sustainable design standards.

These Options should be evaluated by the Board of Education by a process of elimination, narrowing down to a particular facility Option that best meets the program and budgetary concerns of the Bedford Area School District.

# OPTION EXPLORATION SUMMARY

## Summary of Options

### OPTION 1 "Fitness Center Addition"

| | |
|---|---|
| **K-5** | Maintain Bedford Elementary School. |
| **6-8** | Maintain Bedford Middle School. |
| **9-12** | Fitness Center Addition and Renovations to Bedford High School. |
| **OPT 1A** | Fitness Center Addition & Selective Athletic Renovations - No Reimbursement. |
| **OPT 1B** | Fitness Center Addition & Selective Building Renovations - Reimbursement. |
| **OPT 1C** | Fitness Center Addition & Selective Building Renovations - Reimbursement & LEED. |
| **OPT 1D** | Fitness Center Addition & Full Building Renovations - Reimbursement & LEED. |
| **DAO** | Maintain DAO at Bedford High School. |

### OPTION 2 "Gymnasium Addition"

| | |
|---|---|
| **K-5** | Maintain Bedford Elementary School. |
| **6-8** | Maintain Bedford Middle School. |
| **9-12** | Gym Addition and Renovations to Bedford High School. |
| **OPT 2A** | Gym Addition & Selective Athletic Renovations - No Reimbursement. |
| **OPT 2B** | Gym Addition & Selective Building Renovations - Reimbursement. |
| **OPT 2C** | Gym Addition & Selective Building Renovations - Reimbursement & LEED. |
| **OPT 2D** | Gym Addition & Full Building Renovations - Reimbursement & LEED. |
| **DAO** | Maintain DAO at Bedford High School. |

# OPTION EXPLORATION SUMMARY

## Options Information

Each Option includes the following information: Option Summary; Option Cost Summary; Student Enrollment / Capacity Evaluation; Proposed Educational Program; Proposed Elementary and Secondary Room Schedules; and Projected Reimbursement.

**Option Summary:** A summary of the respective option program summary illustrating the proposed Bedford High School Additions and Renovations.

**Proposed Educational Program:** A summary of the respective option Proposed Educational Program data. The information includes: Proposed Grade Alignment; Potential Work; PDE Functional Capacity; and the Highest Projected Enrollment for each grade grouping.

**Option Costs:** A Cost Summary of the respective option including Maximum Eligible Reimbursement, Construction New Square Footage, Cost for Additions, Renovation Cost, Total Construction Cost, and Total Project Cost.

**Proposed Room Schedules:** Room schedules for the High School provides data for the Proposed Building Capacity. Spaces that receive capacity are shown as well as each Building's Functional Capacity and Total Capacity.

**Projected Reimbursement** Detailed Cost Data for the respective option including projected state reimbursement.

## Option Cost Summary

A Cost Summary of all options including Maximum Eligible Reimbursement, Construction New Square Footage, Cost for Additions, Renovation Cost, Total Construction Cost, and Total Project Cost.

# BEDFORD AREA SCHOOL DISTRICT

## OPTION 1

## "Fitness Center Addition"

| | Itemized Constr. Cost | Itemized Project Cost |
|---|---|---|
| **OPT 1A** **$8,850,000** | | |
| **Site Acquisition - 1 Parcel** | $250,000 | $250,000 |
| **Fitness Center Addition** | $2,000,000 | $2,457,000 |
| **Locker Renovations - First Floor** | $1,300,000 | $1,597,000 |
| **Gym Renovations - Second Floor** | $2,200,000 | $2,703,000 |
| **Technology Improvements** | $1,500,000 | $1,843,000 |
| **OPT 1B** **$10,350,000** | | |
| **Additional Minimal Renovations for PDE Reimbursement** | $1,250,000 | $1,500,000 |
| **OPT 1C** **$19,850,000** | | |
| **Additional Minimal Renovations for PDE & LEED Reimbursement** | $7,750,000 | $9,500,000 |
| **OPT 1D** **$27,350,000** | | |
| **Additional Full Renovations for PDE & LEED Reimbursement** | $5,731,000 | $7,500,000 |
| **Track** **$330,000** | | |
| **Track Resurfacing** | $275,000 | $330,000 |

## OPTION 2

## "Gymnasium Addition"

| | | Itemized Constr. Cost | Itemized Project Cost |
|---|---|---|---|
| **OPT 2A** | **$11,500,000** | | |
| **Site Acquisition - 2 Parcels** | | $500,000 | $500,000 |
| **Gymnasium Addition** | | $4,000,000 | $4,857,000 |
| **Locker Renovations - First Floor** | | $1,300,000 | $1,597,000 |
| **Gym Renovations - Second Floor** | | $2,200,000 | $2,703,000 |
| **Technology Improvements** | | $1,500,000 | $1,843,000 |
| **OPT 2B** | **$13,000,000** | | |
| **Additional Minimal Renovations for PDE Reimbursement** | | $1,250,000 | $1,500,000 |
| **OPT 2C** | **$22,500,000** | | |
| **Additional Minimal Renovations for PDE & LEED Reimbursement** | | $7,750,000 | $9,500,000 |
| **OPT 2D** | **$30,000,000** | | |
| **Additional Full Renovations for PDE & LEED Reimbursement** | | $5,731,000 | $7,500,000 |
| **Track** | **$330,000** | | |
| **Track Resurfacing** | | $275,000 | $330,000 |

## EXISTING EDUCATIONAL PROGRAM

### Existing Building Capacity for Grades K-5; 6-8, 9-12; K-12

| Building | Existing Grade Alignment | 2013-14 Enrollment | ** Functional Capacity | | Highest Projected Enrollment | |
|---|---|---|---|---|---|---|
| | | | DIST | PDE | Methods | Current + 10% * |
| BEDFORD ELEMENTARY SCHOOL | K-5 | 783 | 814 | 950 | | |
| K-5 TOTAL | | 783 | 814 | 950 | 754 | 861 |
| BEDFORD MIDDLE SCHOOL | 6-8 | 488 | 630 | 708 | | |
| 6-8 TOTAL | | 488 | 630 | 708 | 414 | 537 |
| BEDFORD HIGH SCHOOL | 9-12 | 632 | 607 | 683 | | |
| 9-12 TOTAL | | 632 | 607 | 683 | 606 | 695 |
| K-12 TOTAL | | 1,903 | 2,051 | 2,341 | 1,774 | 2,093 |

* PDE allows Current Enrollment + 10% to be used as Highest Projected Enrollment for Project Grades.

** Elementary *Functional Capacity* are Graded Classrooms K-5; *Special Education Capacity* is not included in the Functional Capacity or Total Capacity.

## OPTION 1 "Fitness Center Addition"

| | |
|---|---|
| **K-5** | Maintain Bedford Elementary School. |
| **6-8** | Maintain Bedford Middle School. |
| **9-12** | Fitness Center Addition and Renovations to Bedford High School. |
| **OPT 1A** | Fitness Center Addition & Selective Athletic Renovations - No Reimbursement. |
| **OPT 1B** | Fitness Center Addition & Selective Building Renovations - Reimbursement. |
| **OPT 1C** | Fitness Center Addition & Selective Building Renovations - Reimbursement & LEED. |
| **OPT 1D** | Fitness Center Addition & Full Building Renovations - Reimbursement & LEED. |
| **DAO** | Maintain DAO at Bedford High School. |

**Pros**

- Fitness Center and Athletic Upgrades
- 1B State Reimbursement
- 1C & 1D State Reimbursement & LEED Reimbursement
- 1C Additional Selective Building Upgrades, Including MEP Upgrades
- 1D Additional Full Building Upgrades, Including MEP Upgrades
- 1C & 1D LEED Project & Energy Savings

**Cons**

- 1A No State Reimbursement
- 1A & 1B No Energy Savings Improvements for Remainder of Building
- 1A & 1B Limited Building Improvements
- 1C & 1D More Expensive First Cost

## OPTION 1 "Fitness Center Addition"

| | |
|---|---|
| 9-12 | Fitness Center Addition and Renovations to Bedford High School. |
| OPT 1A | Fitness Center Addition & Selective Athletic Renovations - No Reimbursement. |
| OPT 1B | Fitness Center Addition & Selective Building Renovations - Reimbursement. |
| OPT 1C | Fitness Center Addition & Selective Building Renovations - Reimbursement & LEED. |
| OPT 1D | Fitness Center Addition & Full Building Renovations - Reimbursement & LEED. |

| | |
|---|---|
| DAO | Maintain DAO at Bedford High School. |

## OPTION EDUCATIONAL PROGRAM

| Building | Proposed Work | Proposed Grade Alignment | Functional Capacity | Highest Enrollment Methods | Projected Enrollment Current +10% |
|---|---|---|---|---|---|
| Bedford ES | Maintain | K-5 | 975 | 754 | 861 |
| Bedford MS | Maintain | 6-8 | 708 | 414 | 537 |
| Bedford HS | Fitness Center Addition | 9-12 | 683 | 606 | 695 |
| K-12 Total | | | 2,366 | 1,774 | 2,093 |

## OPTION 1 "Fitness Center Addition"

| | Max. Eligible Reimb. * | Constr. New S.F. | Constr. Cost for Additions | Renov. Cost | Total Constr. Cost | Total Project Cost |
|---|---|---|---|---|---|---|
| **OPT 1A** | Fitness Center Addition & Selective Athletic Renovations - No Reimbursement | | | | | |
| High School | $0 | 10,000 | $2,000,000 | $5,000,000 | $7,000,000 | $8,600,000 |
| Site Purchase | $0 | | $250,000 | | $250,000 | $250,000 |
| **Total** | **$0** | **10,000** | **$2,250,000** | **$5,000,000** | **$7,250,000** | **$8,850,000** |
| **Annual Energy Savings** | | | | | | **$0** |
| **OPT 1B** | Fitness Center Addition & Selective Athletic Renovations - Reimbursement | | | | | |
| High School | $6,349,420 | 10,000 | $2,000,000 | $6,250,000 | $8,250,000 | $10,100,000 |
| Site Purchase | $250,000 | | $250,000 | $0 | $250,000 | $250,000 |
| **Total** | **$6,599,420** | **10,000** | **$2,250,000** | **$6,250,000** | **$8,500,000** | **$10,350,000** |
| **Annual Energy Savings** | | | | | | **$0** |
| **OPT 1C** | Fitness Center Addition & Selective Building Renovations - Reimbursement & LEED | | | | | |
| High School | $6,926,640 | 10,000 | $2,000,000 | $14,000,000 | $16,000,000 | $19,600,000 |
| Site Purchase | $250,000 | | $250,000 | $0 | $250,000 | $250,000 |
| **Total** | **$7,176,640** | **10,000** | **$2,250,000** | **$14,000,000** | **$16,250,000** | **$19,850,000** |
| **Annual Energy Savings** | | | | | | **$45,000** |
| **OPT 1D** | Fitness Center Addition & Full Building Renovations - Reimbursement & LEED | | | | | |
| High School | $6,926,640 | 10,000 | $2,000,000 | $19,731,000 | $21,731,000 | $27,100,000 |
| Site Purchase | $250,000 | | $250,000 | $0 | $250,000 | $250,000 |
| **Total** | **$7,176,640** | **10,000** | **$2,250,000** | **$19,731,000** | **$21,981,000** | **$27,350,000** |
| **Annual Energy Savings** | | | | | | **$45,000** |

## Proposed Track Resurfacing

| | | | | | | |
|---|---|---|---|---|---|---|
| **Total** | **$0** | **0** | **$0** | **$275,000** | **$275,000** | **$330,000** |

Notes:

* Additional 10% Reimbursement for Qualifying Existing Building also Additional 10% Reimbursement for Qualifying LEED Certification. Qualifying Existing Building must meet reimbursable minimum cost criteria to receive any or part of the additional 10% Reimbursement.

** Existing Renovation Costs must exceed "20% Rule" to qualify for Reimbursement of the existing portion of the facility.

# PROPOSED 9-12 ROOM SCHEDULE — OPTION 1

| | 9-12 EXISTING | | | | | 9-12 PROPOSED | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | BEDFORD HIGH SCHOOL | | | | | | | | | |
| | No. | Area | Total | Dist | PDE | No. | Area | Total | Dist | PDE |
| Gymnasium | 1 | 8,700 | 8,700 | 66 | 66 | 1 | 8,700 | 8,700 | 66 | 66 |
| Auxiliary Gymnasium | 1 | 2,700 | 2,700 | 33 | 33 | 1 | 2,700 | 2,700 | 33 | 33 |
| Adaptive Gymnasium | 1 | 2,700 | 2,700 | | | | | 0 | | |
| Locker Room / Team Room | 3 | 2,300 | 6,900 | | | 3 | 2,300 | 6,900 | | |
| Team Room | | | 0 | | | 2 | 1,200 | 2,400 | | |
| Weight / Cardio Rm | 2 | 965 | 1,930 | | | | | 0 | | |
| Fitness Center | | | 0 | | | 1 | 5,100 | 5,100 | | |
| Training Room | 1 | 505 | 505 | | | 1 | 800 | 800 | | |
| P.E. / Coach Office | 5 | 150 | 750 | | | 6 | 175 | 1,050 | | |
| P.E. / Athletic I.P.C. | 1 | 690 | 690 | | | 1 | 690 | 690 | | |
| Tickets / Concession | 2 | 35 | 70 | | | 2 | 250 | 500 | | |
| Reg Clsrm 660+ SF | 15 | 760 | 11,400 | 375 | 375 | 15 | 760 | 11,400 | 375 | 375 |
| Reg Clsrm < 660 SF | 3 | 640 | 1,920 | | | 3 | 640 | 1,920 | | |
| Science Classroom | 3 | 980 | 2,940 | 75 | 75 | 3 | 980 | 2,940 | 75 | 75 |
| Science < 660 SF | 1 | 640 | 640 | | | 1 | 640 | 640 | | |
| Science Proj Rm / Greenhouse | 1 | 380 | 380 | | | 1 | 380 | 380 | | |
| Science Lab | 3 | 1,240 | 3,720 | 60 | 60 | 3 | 1,240 | 3,720 | 60 | 60 |
| Special Education Clsrm. | 4 | 755 | 3,020 | | | 4 | 755 | 3,020 | | |
| Spec. Educ. Seminar / S.G.I. | 1 | 575 | 575 | | | 1 | 575 | 575 | | |
| S.G.I. / Student Activity | 1 | 560 | 560 | | | 1 | 560 | 560 | | |
| Large Group Instruction | 1 | 1,140 | 1,140 | | | 1 | 1,140 | 1,140 | | |
| Business Clsrm | 1 | 800 | 800 | 25 | 25 | 1 | 800 | 800 | 25 | 25 |
| Business Lab | 2 | 945 | 1,890 | 40 | 40 | 2 | 945 | 1,890 | 40 | 40 |
| Computer Lab (CAD) | 1 | 875 | 875 | 20 | 20 | 1 | 875 | 875 | 20 | 20 |
| T.V. Studio S.G.I. | 1 | 600 | 600 | | | 1 | 600 | 600 | | |
| Art Classroom | 1 | 1,645 | 1,645 | 20 | 20 | 1 | 1,645 | 1,645 | 20 | 20 |
| Music Classroom | 1 | 1,745 | 1,745 | 25 | 25 | 1 | 1,745 | 1,745 | 25 | 25 |
| Family & Consumer Science | 1 | 1,930 | 1,930 | 20 | 20 | 1 | 1,930 | 1,930 | 20 | 20 |
| TE Shop <1800 sf | 1 | 1,175 | 1,175 | | | 1 | 1,175 | 1,175 | | |
| Media Center | 1 | 4,120 | 4,120 | | | 1 | 4,120 | 4,120 | | |
| Stage / Platform | 1 | 1,780 | 1,780 | | | 1 | 1,780 | 1,780 | | |
| Auditorium | 1 | 6,000 | 6,000 | | | 1 | 6,000 | 6,000 | | |
| Student Dining | 1 | 5,830 | 5,830 | | | 1 | 5,830 | 5,830 | | |
| Kitchen Areas | 1 | 3,600 | 3,600 | | | 1 | 3,600 | 3,600 | | |
| Administration / Guidance | 1 | 2,825 | 2,825 | | | 1 | 2,825 | 2,825 | | |
| Health Suite | 1 | 1,350 | 1,350 | | | 1 | 1,350 | 1,350 | | |
| Faculty Dining / Workroom | 2 | 500 | 1,000 | | | 2 | 500 | 1,000 | | |
| Faculty / I.P.C. / Office / P.E. Office | 8 | 165 | 1,320 | | | 8 | 165 | 1,320 | | |
| District Administration Offices | 1 | 7,315 | 7,315 | 18 | 18 | 1 | 7,315 | 7,315 | 18 | 18 |
| FUNCTIONAL CAPACITY | | | | 607 | 683 | | | | 607 | 683 |
| TOTAL CAPACITY | | | | 625 | 701 | | | | 625 | 701 |
| ARCHITECTURAL AREA | | | 177,390 | SF | | | | 187,390 | SF | |
| NEW ARCHITECTURAL AREA | | | | | | | | 10,000 | SF | |

## PROPOSED ATHLETIC ROOM SCHEDULE — OPTION 1

| | 9-12 EXISTING | | | 9-12 PROPOSED | | |
|---|---|---|---|---|---|---|
| | BEDFORD HIGH SCHOOL | | | | | |
| | No. | Area | Total | No. | Area | Total |
| Gymnasium | 1 | 8,700 | 8,700 | 1 | 8,700 | 8,700 |
| Storage | 1 | 125 | 125 | 1 | 125 | 125 |
| Tickets / Concession | 2 | 35 | 70 | 2 | 250 | 500 |
| Fitness Center | | | 0 | 1 | 5,100 | 5,100 |
| Fitness Center Office | | | 0 | 1 | 150 | 150 |
| Fitness Center Storage | | | 0 | 1 | 750 | 750 |
| Team Room | | | 0 | 2 | 1,200 | 2,400 |
| Coach / Official Office | | | 0 | 2 | 150 | 300 |
| Girls' Locker Room | 1 | 2,750 | 2,750 | 1 | 2,750 | 2,750 |
| P.E. Office | 1 | 145 | 145 | 1 | 200 | 200 |
| Boys' Locker Room A | 1 | 2,125 | 2,125 | 1 | 2,125 | 2,125 |
| P.E. Office | 1 | 125 | 125 | 1 | 200 | 200 |
| Boys' Locker Room B | 1 | 2,025 | 2,025 | 1 | 2,025 | 2,025 |
| P.E. Office | 1 | 125 | 125 | 1 | 200 | 200 |
| Training Room | 1 | 550 | 550 | 1 | 800 | 800 |
| Equipment Storage | 2 | 275 | 550 | 2 | 275 | 550 |
| Equipment Storage / Drying Room | | | 0 | 1 | 1,200 | 1,200 |
| Storage Room | | | 0 | | | 0 |
| Gym Office | 1 | 115 | 115 | | | 0 |
| P.E. Office | 1 | 225 | 225 | | | 0 |
| P.E. / Athletic I.P.C | 1 | 690 | 690 | 1 | 690 | 690 |
| Weight / Cardio Rm | 2 | 965 | 1,930 | | | |
| Auxiliary Gym / Wrestling Rm. | 1 | 2,700 | 2,700 | 1 | 2,700 | 2,700 |
| Adaptive Gymnasium | 1 | 2,700 | 2,700 | | | 0 |
| ARCHITECTURAL AREA | | | 27,500 | | | 37,500 |
| NEW ARCHITECTURAL AREA | | | | | | 10,000 |

## PROJECTED REIMBURSEMENT

| Option 1A | PDE Adj. New FTE | RPC | Reimb. Factor | Max Elig. Reimb. | Constr. New S.F. | Constr. Cost for Additions | Renov. Exist. S.F. |
|---|---|---|---|---|---|---|---|
| Bedford H.S. | 820 | 910 | | 0 | 10,000 | 2,000,000 | 177,390 |
| DAO Offices | 19 | 21 | | 0 | | | |
| Site Acquisition | | | | 0 | | 250,000 | |
| **Total** | | | | **$0** | **10,000** | **$2,250,000** | **177,390** |

| Option 1B | PDE Adj. New FTE | RPC | Reimb. Factor | Max Elig. Reimb. | Constr. New S.F. | Constr. Cost for Additions | Renov. Exist. S.F. |
|---|---|---|---|---|---|---|---|
| Bedford H.S. | 820 | 910 | 6,200 | 5,642,000 | 10,000 | 2,000,000 | 177,390 |
| | *Existing | 910 | 620 | 564,200 | | | |
| DAO Offices | 19 | 21 | 6,200 | 130,200 | | | |
| | *Existing | 21 | 620 | 13,020 | | | |
| Site Acquisition | | | | 250,000 | | 250,000 | |
| **Total** | | | | **$6,599,420** | **10,000** | **$2,250,000** | **177,390** |

| Option 1C | PDE Adj. New FTE | RPC | Reimb. Factor | Max Elig. Reimb. | Constr. New S.F. | Constr. Cost for Additions | Renov. Exist. S.F. |
|---|---|---|---|---|---|---|---|
| Bedford H.S. | 820 | 910 | 6,200 | 5,642,000 | 10,000 | 2,000,000 | 177,390 |
| | *Existing | 910 | 620 | 564,200 | | | |
| | *LEED | 910 | 620 | 564,200 | | | |
| DAO Offices | 19 | 21 | 6,200 | 130,200 | | | |
| | *Existing | 21 | 620 | 13,020 | | | |
| | *LEED | 21 | 620 | 13,020 | | | |
| Site Acquisition | | | | 250,000 | | 250,000 | |
| **Total** | | | | **$7,176,640** | **10,000** | **$2,250,000** | **177,390** |

| Option 1D | PDE Adj. New FTE | RPC | Reimb. Factor | Max Elig. Reimb. | Constr. New S.F. | Constr. Cost for Additions | Renov. Exist. S.F. |
|---|---|---|---|---|---|---|---|
| Bedford H.S. | 820 | 910 | 6,200 | 5,642,000 | 10,000 | 2,000,000 | 177,390 |
| | *Existing | 910 | 620 | 564,200 | | | |
| | *LEED | 910 | 620 | 564,200 | | | |
| DAO Offices | 19 | 21 | 6,200 | 130,200 | | | |
| | *Existing | 21 | 620 | 13,020 | | | |
| | *LEED | 21 | 620 | 13,020 | | | |
| Site Acquisition | | | | 250,000 | | 250,000 | |
| **Total** | | | | **$7,176,640** | **10,000** | **$2,250,000** | **177,390** |

| Track Resurfacing | PDE Adj. New FTE | RPC | Reimb. Factor | Max Elig. Reimb. | Constr. New S.F. | Constr. Cost for Additions | Renov. Exist. S.F. |
|---|---|---|---|---|---|---|---|
| Track | | | | 0 | | 0 | 40,000 |
| **Total** | | | | **$0** | **0** | **$0** | **40,000** |

* Additional 10% Reimbursement for *Qualifying Existing Building* also Additional 10% Reimbursement for *Qualifying LEED Certification*. *Qualifying Existing Building* must meet reimbursable minimum cost criteria to receive any or part of the additional 10% Reimbursement.

| Renov. Study Cost | Total Constr. Cost | Total Project Cost | % M.E.R. to T.P.C. | Aid Ratio | % State Share | % Local Share | |
|---|---|---|---|---|---|---|---|
| 5,000,000 | 7,000,000 | 8,600,000 | 0.0000 | 0.5088 | 0.00% | 100.00% | Bedford H.S. |
| | | | | | | | DAO Offices |
| | 250,000 | 250,000 | | | | | Site Acquisition |
| **$5,000,000** | **$7,250,000** | **$8,850,000** | | **0.5088** | | | **Total** |

| Renov. Study Cost | Total Constr. Cost | Total Project Cost | % M.E.R. to T.P.C. | Aid Ratio | % State Share | % Local Share | |
|---|---|---|---|---|---|---|---|
| 6,250,000 | 8,250,000 | 10,100,000 | 0.6376 | 0.5088 | 32.44% | 67.56% | Bedford H.S. |
| | | | | | | | DAO Offices |
| | 250,000 | 250,000 | | | | | Site Acquisition |
| **$6,250,000** | **$8,500,000** | **$10,350,000** | | **0.5088** | | | **Total** |

| Renov. Study Cost | Total Constr. Cost | Total Project Cost | % M.E.R. to T.P.C. | Aid Ratio | % State Share | % Local Share | |
|---|---|---|---|---|---|---|---|
| 14,000,000 | 16,000,000 | 19,600,000 | 0.3615 | 0.5088 | 18.40% | 81.60% | Bedford H.S. |
| | | | | | | | DAO Offices |
| | 250,000 | 250,000 | | | | | Site Acquisition |
| **$14,000,000** | **$16,250,000** | **$19,850,000** | | **0.5088** | | | **Total** |

| Renov. Study Cost | Total Constr. Cost | Total Project Cost | % M.E.R. to T.P.C. | Aid Ratio | % State Share | % Local Share | |
|---|---|---|---|---|---|---|---|
| 19,731,000 | 21,731,000 | 27,100,000 | 0.2624 | 0.5088 | 13.35% | 86.65% | Bedford H.S. |
| | | | | | | | DAO Offices |
| | 250,000 | 250,000 | | | | | Site Acquisition |
| **$19,731,000** | **$21,981,000** | **$27,350,000** | | **0.5088** | | | **Total** |

| Renov. Study Cost | Total Constr. Cost | Total Project Cost | % M.E.R. to T.P.C. | Aid Ratio | % State Share | % Local Share | |
|---|---|---|---|---|---|---|---|
| 275,000 | 275,000 | 330,000 | 0.0000 | 0.5088 | 0.00% | 100.00% | Track |
| **$275,000** | **$275,000** | **$330,000** | | **0.5088** | | | **Total** |

** Existing Renovation Costs must exceed the "20% Rule" to qualify for Reimbursement of the existing portion of the facility.
+ Annual State and Local Shares based upon a 20-year 4% bond issue; Aid Ration = 0.5088

## OPTION 2 "Gymnasium Addition"

| | |
|---|---|
| **K-5** | Maintain Bedford Elementary School. |
| **6-8** | Maintain Bedford Middle School. |
| **9-12** | Gym Addition and Renovations to Bedford High School. |
| **OPT 2A** | Gym Addition & Selective Athletic Renovations - No Reimbursement. |
| **OPT 2B** | Gym Addition & Selective Building Renovations - Reimbursement. |
| **OPT 2C** | Gym Addition & Selective Building Renovations - Reimbursement & LEED. |
| **OPT 2D** | Gym Addition & Full Building Renovations - Reimbursement & LEED. |
| **DAO** | Maintain DAO at Bedford High School. |

**Pros**

- Gymnasium Addition and Athletic Upgrades
- 1B State Reimbursement
- 1C & 1D State Reimbursement & LEED Reimbursement
- 1C Additional Selective Building Upgrades, Including MEP Upgrades
- 1D Additional Full Building Upgrades, Including MEP Upgrades
- 1C & 1D LEED Project & Energy Savings

**Cons**

- 1A No State Reimbursement
- 1A & 1B No Energy Savings Improvements for Remainder of Building
- 1A & 1B Limited Building Improvements
- 1C & 1D More Expensive First Cost

## OPTION 2 "Gymnasium Addition"

| | |
|---|---|
| **9-12** | Gym Addition and Renovations to Bedford High School. |
| **OPT 2A** | Gym Addition & Selective Athletic Renovations - No Reimbursement. |
| **OPT 2B** | Gym Addition & Selective Building Renovations - Reimbursement. |
| **OPT 2C** | Gym Addition & Selective Building Renovations - Reimbursement & LEED. |
| **OPT 2D** | Gym Addition & Full Building Renovations - Reimbursement & LEED. |

| | |
|---|---|
| **DAO** | Maintain DAO at Bedford High School. |

## OPTION EDUCATIONAL PROGRAM

| Building | Proposed Work | Proposed Grade Alignment | Functional Capacity | Highest Enrollment Methods | Projected Enrollment Current +10% |
|---|---|---|---|---|---|
|  Bedford ES | Maintain | K-5 | 975 | 754 | 861 |
|  Bedford MS | Maintain | 6-8 | 708 | 414 | 537 |
|   Bedford HS | Gym Addition | 9-12 | 713 | 606 | 695 |
| **K-12 Total** | | | 2,396 | 1,774 | 2,093 |

## OPTION 2 "Gymnasium Addition"

| | Max. Eligible Reimb. * | Constr. New S.F. | Constr. Cost for Additions | Renov. Cost | Total Constr. Cost | Total Project Cost |
|---|---|---|---|---|---|---|
| **OPT 2A** | Gym Addition & Selective Athletic Renovations - No Reimbursement | | | | | |
| High School | $0 | 20,000 | $4,000,000 | $5,000,000 | $9,000,000 | $11,000,000 |
| Site Purchase | $0 | | $500,000 | | $500,000 | $500,000 |
| **Total** | **$0** | **20,000** | **$4,500,000** | **$5,000,000** | **$9,500,000** | **$11,500,000** |
| **Annual Energy Savings** | | | | | | **$0** |
| **OPT 2B** | Gym Addition & Selective Athletic Renovations - Reimbursement | | | | | |
| High School | $6,349,420 | 20,000 | $4,000,000 | $6,250,000 | $10,250,000 | $12,500,000 |
| Site Purchase | $500,000 | | $500,000 | $0 | $500,000 | $500,000 |
| **Total** | **$6,849,420** | **20,000** | **$4,500,000** | **$6,250,000** | **$10,750,000** | **$13,000,000** |
| **Annual Energy Savings** | | | | | | **$0** |
| **OPT 2C** | Gym Addition & Selective Building Renovations - Reimbursement & LEED | | | | | |
| High School | $6,926,640 | 20,000 | $4,000,000 | $14,000,000 | $18,000,000 | $22,000,000 |
| Site Purchase | $500,000 | | $500,000 | $0 | $500,000 | $500,000 |
| **Total** | **$7,426,640** | **20,000** | **$4,500,000** | **$14,000,000** | **$18,500,000** | **$22,500,000** |
| **Annual Energy Savings** | | | | | | **$45,000** |
| **OPT 2D** | Gym Addition & Full Building Renovations - Reimbursement & LEED | | | | | |
| High School | $6,926,640 | 20,000 | $4,000,000 | $19,731,000 | $23,731,000 | $29,500,000 |
| Site Purchase | $500,000 | | $500,000 | $0 | $500,000 | $500,000 |
| **Total** | **$7,426,640** | **20,000** | **$4,500,000** | **$19,731,000** | **$24,231,000** | **$30,000,000** |
| **Annual Energy Savings** | | | | | | **$45,000** |

### Proposed Track Resurfacing

| | | | | | | |
|---|---|---|---|---|---|---|
| **Total** | **$0** | **0** | **$0** | **$275,000** | **$275,000** | **$330,000** |

Notes:

* Additional 10% Reimbursement for Qualifying Existing Building also Additional 10% Reimbursement for Qualifying LEED Certification. Qualifying Existing Building must meet reimbursable minimum cost criteria to receive any or part of the additional 10% Reimbursement.

** Existing Renovation Costs must exceed "20% Rule" to qualify for Reimbursement of the existing portion of the facility.

# PROPOSED 9-12 ROOM SCHEDULE — OPTION 2

| | 9-12 EXISTING | | | | | 9-12 PROPOSED | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | BEDFORD HIGH SCHOOL | | | | | | | | | |
| | No. | Area | Total | Dist | PDE | No. | Area | Total | Dist | PDE |
| Gymnasium | 1 | 8,700 | 8,700 | 66 | 66 | 1 | 12,000 | 12,000 | 132 | 132 |
| Auxiliary Gymnasium | 1 | 2,700 | 2,700 | 33 | 33 | | | 0 | | |
| Adaptive Gymnasium | 1 | 2,700 | 2,700 | | | | | 0 | | |
| Locker Room / Team Room | 3 | 2,300 | 6,900 | | | 3 | 2,300 | 6,900 | | |
| Team Room | | | 0 | | | 2 | 1,200 | 2,400 | | |
| Weight / Wrestling / Cardio Rm | 2 | 965 | 1,930 | | | 1 | 4,400 | 4,400 | | |
| Fitness Center | | | 0 | | | 1 | 4,400 | 4,400 | | |
| Training Room | 1 | 505 | 505 | | | 1 | 800 | 800 | | |
| P.E. / Coach Office | 5 | 150 | 750 | | | 6 | 175 | 1,050 | | |
| P.E. / Athletic I.P.C. | 1 | 690 | 690 | | | 1 | 690 | 690 | | |
| Tickets / Concession | 2 | 35 | 70 | | | 2 | 250 | 500 | | |
| Reg Clsrm 660+ SF | 15 | 760 | 11,400 | 375 | 375 | 15 | 760 | 11,400 | 375 | 375 |
| Reg Clsrm < 660 SF | 3 | 640 | 1,920 | | | 3 | 640 | 1,920 | | |
| Science Classroom | 3 | 980 | 2,940 | 75 | 75 | 3 | 980 | 2,940 | 75 | 75 |
| Science < 660 SF | 1 | 640 | 640 | | | 1 | 640 | 640 | | |
| Science Proj Rm / Greenhouse | 1 | 380 | 380 | | | 1 | 380 | 380 | | |
| Science Lab | 3 | 1,240 | 3,720 | 60 | 60 | 3 | 1,240 | 3,720 | 60 | 60 |
| Special Education Clsrm. | 4 | 755 | 3,020 | | | 4 | 755 | 3,020 | | |
| Spec. Educ. Seminar / S.G.I. | 1 | 575 | 575 | | | 1 | 575 | 575 | | |
| S.G.I. / Student Activity | 1 | 560 | 560 | | | 1 | 560 | 560 | | |
| Large Group Instruction | 1 | 1,140 | 1,140 | | | 1 | 1,140 | 1,140 | | |
| Business Clsrm | 1 | 800 | 800 | 25 | 25 | 1 | 800 | 800 | 25 | 25 |
| Business Lab | 2 | 945 | 1,890 | 40 | 40 | 2 | 945 | 1,890 | 40 | 40 |
| Computer Lab (CAD) | 1 | 875 | 875 | 20 | 20 | 1 | 875 | 875 | 20 | 20 |
| T.V. Studio S.G.I. | 1 | 600 | 600 | | | 1 | 600 | 600 | | |
| Art Classroom | 1 | 1,645 | 1,645 | 20 | 20 | 1 | 1,645 | 1,645 | 20 | 20 |
| Music Classroom | 1 | 1,745 | 1,745 | 25 | 25 | 1 | 1,745 | 1,745 | 25 | 25 |
| Family & Consumer Science | 1 | 1,930 | 1,930 | 20 | 20 | 1 | 1,930 | 1,930 | 20 | 20 |
| TE Shop <1800 sf | 1 | 1,175 | 1,175 | | | 1 | 1,175 | 1,175 | | |
| Media Center | 1 | 4,120 | 4,120 | | | 1 | 4,120 | 4,120 | | |
| Stage / Platform | 1 | 1,780 | 1,780 | | | 1 | 1,780 | 1,780 | | |
| Auditorium | 1 | 6,000 | 6,000 | | | 1 | 6,000 | 6,000 | | |
| Student Dining | 1 | 5,830 | 5,830 | | | 1 | 5,830 | 5,830 | | |
| Kitchen Areas | 1 | 3,600 | 3,600 | | | 1 | 3,600 | 3,600 | | |
| Administration / Guidance | 1 | 2,825 | 2,825 | | | 1 | 2,825 | 2,825 | | |
| Health Suite | 1 | 1,350 | 1,350 | | | 1 | 1,350 | 1,350 | | |
| Faculty Dining / Workroom | 2 | 500 | 1,000 | | | 2 | 500 | 1,000 | | |
| Faculty / I.P.C. / Office / P.E. Office | 8 | 165 | 1,320 | | | 8 | 165 | 1,320 | | |
| District Administration Offices | 1 | 7,315 | 7,315 | 18 | 18 | 1 | 7,315 | 7,315 | 18 | 18 |
| FUNCTIONAL CAPACITY | | | | 607 | 683 | | | | 634 | 713 |
| TOTAL CAPACITY | | | | 625 | 701 | | | | 652 | 731 |
| ARCHITECTURAL AREA | | | 177,390 | SF | | | | 197,390 | SF | |
| NEW ARCHITECTURAL AREA | | | | | | | | 20,000 | SF | |

## PROPOSED ATHLETIC ROOM SCHEDULE — OPTION 2

| | 9-12 EXISTING | | | 9-12 PROPOSED | | |
|---|---|---|---|---|---|---|
| | BEDFORD HIGH SCHOOL | | | | | |
| | No. | Area | Total | No. | Area | Total |
| Gymnasium | 1 | 8,700 | 8,700 | 1 | 12,000 | 12,000 |
| Storage | 1 | 125 | 125 | 2 | 725 | 1,450 |
| Tickets / Concession | 2 | 35 | 70 | 2 | 250 | 500 |
| Fitness Center | | | 0 | 1 | 4,400 | 4,400 |
| Fitness Center Office | | | 0 | 1 | 150 | 150 |
| Fitness Center Storage | | | 0 | 1 | 150 | 150 |
| Wrestling Gym | | | 0 | 1 | 4,400 | 4,400 |
| Team Room | | | 0 | 2 | 1,200 | 2,400 |
| Coach / Official Office | | | 0 | 2 | 150 | 300 |
| Girls' Locker Room | 1 | 2,750 | 2,750 | 1 | 2,750 | 2,750 |
| P.E. Office | 1 | 145 | 145 | 1 | 200 | 200 |
| Boys' Locker Room A | 1 | 2,125 | 2,125 | 1 | 2,125 | 2,125 |
| P.E. Office | 1 | 125 | 125 | 1 | 200 | 200 |
| Boys' Locker Room B | 1 | 2,025 | 2,025 | 1 | 2,025 | 2,025 |
| P.E. Office | 1 | 125 | 125 | 1 | 200 | 200 |
| Training Room | 1 | 550 | 550 | 1 | 800 | 800 |
| Equipment Storage | 2 | 275 | 550 | 2 | 275 | 550 |
| Equipment Storage / Drying Room | | | 0 | 1 | 1,200 | 1,200 |
| Storage Room | | | 0 | 1 | 2,700 | 2,700 |
| Gym Office | 1 | 115 | 115 | | | 0 |
| P.E. Office | 1 | 225 | 225 | | | 0 |
| P.E. / Athletic I.P.C | 1 | 690 | 690 | 1 | 690 | 690 |
| Weight / Cardio Rm | 2 | 965 | 1,930 | | | |
| Auxiliary Gym / Wrestling Rm. | 1 | 2,700 | 2,700 | | | 0 |
| Adaptive Gymnasium | 1 | 2,700 | 2,700 | | | 0 |
| ARCHITECTURAL AREA | | | 27,500 | | | 47,500 |
| NEW ARCHITECTURAL AREA | | | | | | 20,000 |

## PROJECTED REIMBURSEMENT

| Option 2A | PDE Adj. New FTE | RPC | Reimb. Factor | Max Elig. Reimb. | Constr. New S.F. | Constr. Cost for Additions | Renov. Exist. S.F. |
|---|---|---|---|---|---|---|---|
| Bedford H.S. | 820 | 910 | | 0 | 20,000 | 4,000,000 | 177,390 |
| DAO Offices | 19 | 21 | | 0 | | | |
| Site Acquisition | | | | 0 | | 500,000 | |
| **Total** | | | | **$0** | **20,000** | **$4,500,000** | **177,390** |

| Option 2B | PDE Adj. New FTE | RPC | Reimb. Factor | Max Elig. Reimb. | Constr. New S.F. | Constr. Cost for Additions | Renov. Exist. S.F. |
|---|---|---|---|---|---|---|---|
| Bedford H.S. | 820 | 910 | 6,200 | 5,642,000 | 20,000 | 4,000,000 | 177,390 |
| | *Existing | 910 | 620 | 564,200 | | | |
| DAO Offices | 19 | 21 | 6,200 | 130,200 | | | |
| | *Existing | 21 | 620 | 13,020 | | | |
| Site Acquisition | | | | 500,000 | | 500,000 | |
| **Total** | | | | **$6,849,420** | **20,000** | **$4,500,000** | **177,390** |

| Option 2C | PDE Adj. New FTE | RPC | Reimb. Factor | Max Elig. Reimb. | Constr. New S.F. | Constr. Cost for Additions | Renov. Exist. S.F. |
|---|---|---|---|---|---|---|---|
| Bedford H.S. | 820 | 910 | 6,200 | 5,642,000 | 20,000 | 4,000,000 | 177,390 |
| | *Existing | 910 | 620 | 564,200 | | | |
| | *LEED | 910 | 620 | 564,200 | | | |
| DAO Offices | 19 | 21 | 6,200 | 130,200 | | | |
| | *Existing | 21 | 620 | 13,020 | | | |
| | *LEED | 21 | 620 | 13,020 | | | |
| Site Acquisition | | | | 500,000 | | 500,000 | |
| **Total** | | | | **$7,426,640** | **20,000** | **$4,500,000** | **177,390** |

| Option 2D | PDE Adj. New FTE | RPC | Reimb. Factor | Max Elig. Reimb. | Constr. New S.F. | Constr. Cost for Additions | Renov. Exist. S.F. |
|---|---|---|---|---|---|---|---|
| Bedford H.S. | 820 | 910 | 6,200 | 5,642,000 | 20,000 | 4,000,000 | 177,390 |
| | *Existing | 910 | 620 | 564,200 | | | |
| | *LEED | 910 | 620 | 564,200 | | | |
| DAO Offices | 19 | 21 | 6,200 | 130,200 | | | |
| | *Existing | 21 | 620 | 13,020 | | | |
| | *LEED | 21 | 620 | 13,020 | | | |
| Site Acquisition | | | | 500,000 | | 500,000 | |
| **Total** | | | | **$7,426,640** | **20,000** | **$4,500,000** | **177,390** |

| Track Resurfacing | PDE Adj. New FTE | RPC | Reimb. Factor | Max Elig. Reimb. | Constr. New S.F. | Constr. Cost for Additions | Renov. Exist. S.F. |
|---|---|---|---|---|---|---|---|
| Track | | | | 0 | | 0 | 40,000 |
| **Total** | | | | **$0** | **0** | **$0** | **40,000** |

* Additional 10% Reimbursement for *Qualifying Existing Building* also Additional 10% Reimbursement for *Qualifying LEED Certification*. *Qualifying Existing Building* must meet reimbursable minimum cost criteria to receive any or part of the additional 10% Reimbursement.

| Renov. Study Cost | Total Constr. Cost | Total Project Cost | % M.E.R. to T.P.C. | Aid Ratio | % State Share | % Local Share | |
|---|---|---|---|---|---|---|---|
| 5,000,000 | 9,000,000 | 11,000,000 | 0.0000 | 0.5088 | 0.00% | 100.00% | Bedford H.S. |
| | | | | | | | DAO Offices |
| | 500,000 | 500,000 | | | | | Site Acquisition |
| **$5,000,000** | **$9,500,000** | **$11,500,000** | | **0.5088** | | | **Total** |

| Renov. Study Cost | Total Constr. Cost | Total Project Cost | % M.E.R. to T.P.C. | Aid Ratio | % State Share | % Local Share | |
|---|---|---|---|---|---|---|---|
| 6,250,000 | 10,250,000 | 12,500,000 | 0.5269 | 0.5088 | 26.81% | 73.19% | Bedford H.S. |
| | | | | | | | DAO Offices |
| | 500,000 | 500,000 | | | | | Site Acquisition |
| **$6,250,000** | **$10,750,000** | **$13,000,000** | | **0.5088** | | | **Total** |

| Renov. Study Cost | Total Constr. Cost | Total Project Cost | % M.E.R. to T.P.C. | Aid Ratio | % State Share | % Local Share | |
|---|---|---|---|---|---|---|---|
| 14,000,000 | 18,000,000 | 22,000,000 | 0.3301 | 0.5088 | 16.79% | 83.21% | Bedford H.S. |
| | | | | | | | DAO Offices |
| | 500,000 | 500,000 | | | | | Site Acquisition |
| **$14,000,000** | **$18,500,000** | **$22,500,000** | | **0.5088** | | | **Total** |

| Renov. Study Cost | Total Constr. Cost | Total Project Cost | % M.E.R. to T.P.C. | Aid Ratio | % State Share | % Local Share | |
|---|---|---|---|---|---|---|---|
| 19,731,000 | 23,731,000 | 29,500,000 | 0.2476 | 0.5088 | 12.60% | 87.40% | Bedford H.S. |
| | | | | | | | DAO Offices |
| | 500,000 | 500,000 | | | | | Site Acquisition |
| **$19,731,000** | **$24,231,000** | **$30,000,000** | | **0.5088** | | | **Total** |

| Renov. Study Cost | Total Constr. Cost | Total Project Cost | % M.E.R. to T.P.C. | Aid Ratio | % State Share | % Local Share | |
|---|---|---|---|---|---|---|---|
| 275,000 | 275,000 | 330,000 | 0.0000 | 0.5088 | 0.00% | 100.00% | Track |
| **$275,000** | **$275,000** | **$330,000** | | **0.5088** | | | **Total** |

** Existing Renovation Costs must exceed the "20% Rule" to qualify for Reimbursement of the existing portion of the facility.
+ Annual State and Local Shares based upon a 20-year 4% bond issue; Aid Ration = 0.5088

# INTRODUCTION TO OPTIONS COST SUMMARY

## Option Cost Summary

This section of the Feasibility Study is a Cost Summary of all options including Maximum Eligible Reimbursement, Construction New Square Footage, Cost for Additions, Renovation Cost, Total Construction Cost, and Total Project Cost.

## PlanCon "20% Rule"

Existing Renovation Costs must exceed the "20% Rule" to qualify for Reimbursement of the existing portion of the facility.

Based on the provisions of Basic Education Circular (BEC) 24 P.S. 7-733, "School Construction Reimbursement Criteria", if the Adjusted Estimated Alteration costs for a project fall below 20% of the replacement value at the time a project is bid, the alteration work will be non-reimbursable. If the project is not voided and the District still receives reimbursement for any additions, the project building will not be eligible for reimbursement for alterations for the next 20 years unless a request for a variance is approved by the Pennsylvania Department of Education.

## Minimum Renovation Costs for PlanCon Reimbursement Eligibility

**Table 20** profiles the data for PlanCon Reimbursement Eligibility based on the "20% Rule" as outlined above for the Proposed Options.

| TABLE 20 | PDE Total Existing Capacity | PDE Replacement Value | PDE 20% Rule Value | Project Renovation Cost | Cost Difference | Reimb. Eligibility Status |
|---|---|---|---|---|---|---|
| Bedford Elementary School | 975 | $16,056,300 | $3,211,260 | $6,411,500 | $3,200,240 | Eligible |
| Bedford Middle School | 708 | $15,588,036 | $3,117,607 | $331,300 | -$2,786,307 | Not Eligible |
| Bedford High School | 742 | $16,336,614 | $3,267,323 | $19,731,000 | $16,463,677 | Eligible |

## OPTION EXPLORATION SUMMARY

### Summary of Options

### OPTION 1 "Fitness Center Addition"

| | |
|---|---|
| **K-5** | Maintain Bedford Elementary School. |
| **6-8** | Maintain Bedford Middle School. |
| **9-12** | Fitness Center Addition and Renovations to Bedford High School. |
| **OPT 1A** | Fitness Center Addition & Selective Athletic Renovations - No Reimbursement. |
| **OPT 1B** | Fitness Center Addition & Selective Building Renovations - Reimbursement. |
| **OPT 1C** | Fitness Center Addition & Selective Building Renovations - Reimbursement & LEED. |
| **OPT 1D** | Fitness Center Addition & Full Building Renovations - Reimbursement & LEED. |
| **DAO** | Maintain DAO at Bedford High School. |

### OPTION 2 "Gymnasium Addition"

| | |
|---|---|
| **K-5** | Maintain Bedford Elementary School. |
| **6-8** | Maintain Bedford Middle School. |
| **9-12** | Gym Addition and Renovations to Bedford High School. |
| **OPT 2A** | Gym Addition & Selective Athletic Renovations - No Reimbursement. |
| **OPT 2B** | Gym Addition & Selective Building Renovations - Reimbursement. |
| **OPT 2C** | Gym Addition & Selective Building Renovations - Reimbursement & LEED. |
| **OPT 2D** | Gym Addition & Full Building Renovations - Reimbursement & LEED. |
| **DAO** | Maintain DAO at Bedford High School. |

| | Max. Eligible Reimb. * | Constr. New S.F. | Constr. Cost for Additions | Renov. Cost | Total Constr. Cost | Total Project Cost |
|---|---|---|---|---|---|---|
| **OPTION 1 "Fitness Center Addition"** | | | | | | |
| **OPT 1A** | $0 | 10,000 | $2,250,000 | $5,000,000 | $7,250,000 | $8,850,000 |
| Annual Energy Savings | | | | | | $0 |
| **OPT 1B** | $6,599,420 | 10,000 | $2,250,000 | $6,250,000 | $8,500,000 | $10,350,000 |
| Annual Energy Savings | | | | | | $0 |
| **OPT 1C** | $7,176,640 | 10,000 | $2,250,000 | $14,000,000 | $16,250,000 | $19,850,000 |
| Annual Energy Savings | | | | | | $45,000 |
| **OPT 1D** | $7,176,640 | 10,000 | $2,250,000 | $19,731,000 | $21,981,000 | $27,350,000 |
| Annual Energy Savings | | | | | | $45,000 |
| **OPTION 2 "Gymnasium Addition"** | | | | | | |
| **OPT 2A** | $0 | 20,000 | $4,500,000 | $5,000,000 | $9,500,000 | $11,500,000 |
| Annual Energy Savings | | | | | | $0 |
| **OPT 2B** | $6,849,420 | 20,000 | $4,500,000 | $6,250,000 | $10,750,000 | $13,000,000 |
| Annual Energy Savings | | | | | | $0 |
| **OPT 2C** | $7,426,640 | 20,000 | $4,500,000 | $14,000,000 | $18,500,000 | $22,500,000 |
| Annual Energy Savings | | | | | | $45,000 |
| **OPT 2D** | $7,426,640 | 20,000 | $4,500,000 | $19,731,000 | $24,231,000 | $30,000,000 |
| Annual Energy Savings | | | | | | $45,000 |
| **Proposed Track Resurfacing** | | | | | | |
| **Track** | $0 | 0 | $0 | $275,000 | $275,000 | $330,000 |

Notes:

* Additional 10% Reimbursement for Qualifying Existing Building also Additional 10% Reimbursement for Qualifying LEED Certification. Qualifying Existing Building must meet reimbursable minimum cost criteria to receive any or part of the additional 10% Reimbursement.

** Existing Renovation Costs must exceed "20% Rule" to qualify for Reimbursement of the existing portion of the facility.

# ENERGY PORTFOLIO SURVEY DATA

## SELECTED OPTIONS

## SUPPLEMENTAL INFORMATION

Within the District-Wide Facility Study, Energy Portfolio Surveys must be included for each existing building and for each Construction Option that is being considered for PlanCon Projects submitted after 1 July 2011. This is provided as supplemental information.

1. Surveys for each Existing Building

2. Surveys for the Construction Options: This Survey entails providing a predictive utility budget, using the EPA/DOE Target Finder tool, identifying the annual site and source energy and annual water consumption.

# ENERGY PORTFOLIO SURVEY DATA

**Bedford Elementary School**

# ENERGY PORTFOLIO SURVEY DATA

**Bedford Middle School**

# ENERGY PORTFOLIO SURVEY DATA

**Bedford High School**

## ENERGY PORTFOLIO SURVEY DATA

**OPTION 1A & 1B** **Bedford High School**

## ENERGY PORTFOLIO SURVEY DATA

**OPTION 1C & 1D** **Bedford High School**

# ENERGY PORTFOLIO SURVEY DATA

**OPTION 2A & 2B** **Bedford High School**

## ENERGY PORTFOLIO SURVEY DATA

**OPTION 2C & 2D** **Bedford High School**

# DEFINITIONS

The following section is included in this report to present the reader with the terminology used in this Study.

**Adjusted Capacity** - The adjusted capacity reflects usage of a building in compliance with Pennsylvania Department of Education (PDE) guidelines. These guidelines include individual classroom spaces for all PDE recommended educational subjects, including art, music, and special education programs; and, occupancy use of all support services and programs per recommended minimum square footage.

**Architectural Area -** The sum of the areas of all floors, including basements, mezzanines, and penthouses, with a 6 ft. 6 in. minimum head room height. The area is measured from the exterior faces of the exterior walls. The area of open roofed-over paved areas and covered walkways is also included, but multiplied by a factor of 0.50. The area does not include roof overhangs, pipe trenches, exterior steps, or terraces.

**Building Replacement Value -** This value pertains to alteration work for an existing building. A project is only eligible for state reimbursement when the total alteration costs are greater than 20% of the replacement value for the building. The value is determined by following calculations of the PDE formula. (A capacity value or full-time equivalent (FTE) value is calculated for an existing building. The FTE is then multiplied by the PDE recommended square feet per student. This value, the recommended architectural area, is then multiplied by a construction cost per square foot factor to equal the building replacement value.)

**CARF -** Capital Account Reimbursement Fraction as determined by the Pennsylvania Department of Education.

**Classroom Equivalent -** An 800 sq. ft. space which can be subdivided into small group instructional areas for special support programs or be considered as a classroom.

**Cohort Survival -** A population projection method based upon historic data averages and multiplied by a retention ratio to determine future projections.

**Current Capacity -** The capacity reflects the current usage of spaces in a building. Room capacities are given to specific instructional spaces as determined, but may not be the original capacity when the school was constructed, or meet PDE guidelines for square footage. The capacity represents the PDE designated number of students that will occupy a space (regardless of the actual number of students that will occupy a space). The sum of all individual room capacities will equal the total building capacity.

## DEFINITIONS

**Enrollment -** The number of students that make up the student population in a school for the current year. Enrollment data is supplied for each grade level. The building enrollment includes only the student population in the grade levels which are to be housed by the building.

**Enrollment Projections -** Enrollment projections are calculated and supplied by the school district. The projections span from a current given year, to either five or ten years into the future for each grade level. The district enrollment projection model uses resident live birth data and grade progression rates determined by enrollment patterns from the most recent five years for grades 2 to 12. Retention rates for kindergarten and first grade are determined from births five and six years earlier, respectively. These ten-year projections are used to determine an increase or decline in the student population for each grade level. This date can be used to determine a need for more classroom space in the future.

**LEED® -** The Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ encourages and accelerates global adoption of sustainable green building and development practices through the creation and implementation of universally understood and accepted tools and performance criteria. LEED certification provides independent, third-party verification that a building project meets the highest green building and performance measures.

**PlanCon -** When a school district undertakes a major construction project and seeks reimbursement from the Commonwealth, a process known as PlanCon is initiated. PlanCon, an acronym for Planning and Construction Workbook, is a set of forms and procedures used to apply for Commonwealth reimbursement. The PlanCon forms are designed to: (1) document a local school district's planning process; (2) provide justification for a project to the public; (3) ascertain compliance with state laws and regulations; and (4) establish the level of State participation in the cost of the project.

**Rated Pupil Capacity (RPC)** - The figure used to determine amount of reimbursement. RPC is determined by multiplying the Full Time Equivalent (FTE) by the RPC factor.

**Reimbursement** - For school construction projects, it is based on the capacity of a building that can be justified by current or projected student enrollment and is based on the Rated Pupil Capacity (RPC) of a building.

**Retention Ratio -** A ratio of the difference between a past year population and a present year population for a given progressing grade.

## DEFINITIONS

**Scheduled Area** - The sum of areas of instructional spaces which accommodate direct student instruction, such as classrooms, laboratories, student project or activity rooms, seminar rooms, shops, band and choral rooms, and physical education stations. General use areas are also included, such as libraries, locker rooms, team rooms, instructors' offices, multipurpose rooms, auditorium, stage, cafeteria and kitchen areas, health suites, faculty rooms, and administration suites. However, service and general storage areas, toilet rooms, custodial rooms, maintenance and utility areas, and circulation are not included.

**Total Project Cost** - The sum of areas of instructional spaces which accommodate direct student instruction, such as classrooms, laboratories, student project or activity rooms, seminar rooms, shops, band and choral rooms, and physical education stations. General use areas are also included, such as libraries, locker rooms, team rooms, instructors' offices, multipurpose rooms, auditorium, stage, cafeteria and kitchen areas, health suites, faculty rooms, and administration suites. However, service and general storage areas, toilet rooms, custodial rooms, maintenance and utility areas, and circulation are not included.

# INFORMATION UTILIZED IN THE STUDY

**District Aid Ration - 0.5088**

## DESIGN GUIDELINES FOR NEW CONSTRUCTION

| | S.F. Per Student | Cost per S.F. New Construction |
|---|---|---|
| | | ADDITIONS AND ALTERATIONS |
| **Elementary School** | 125 s.f. | $180-200 / s.f. construction cost for additions |
| **Middle School** | 150 s.f. | $180-200 / s.f. construction cost for additions |
| **High School** | 175-200 s.f. | $180-200 / s.f. construction cost for additions |

## DESIGN GUIDELINES FOR RENOVATION

| | |
|---|---|
| Educational Upgrade | See Part II Facilities |
| Renovation | See Part II Facilities |

**Site Acquisition or State Reimbursement on Site Acquisition**
**– Not included in Total Construction Cost**

**Total Project Costs Include:**
**25% of construction cost for the following construction-related costs.**

| | |
|---|---|
| Movable Fixtures and Equipment | Architect/Engineering Fees |
| Project Contingency | Financing Cost |
| Construction-Related Costs | Project Supervision |

# AUTHORS OF THE STUDY

## EI ASSOCIATES - ARCHITECT

| | | |
|---|---|---|
| Architect - Design/Educational | Mark S. Barnhardt, AIA | PA License RA011059X |
| Architect - Technical | Daniel J. Bierzonski, AIA | PA License RA011076X |
| Architect - Technical | Peter C. Ortiz, RA | PA License RA013455B |
| Project Manager - Design | Ann D. Long, LEED® AP BD+C | |
| Architect - Design | Andrew R. Blaydon, AIA | PA License RA406616 |

## GATTER & DIEHL, INC. - MEP ENGINEERS

| | |
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| Engineer - MEP | Jeffrey L. Crist, PE - LEED® AP BD+C |
| Engineer - MEP | Richard L. Kreiger, PE - LEED® AP BD+C |
| Engineer - Mechanical | Dorsey A. Wertz, E.I.T. |
| Engineer - Electrical | Gregory V. Hoover |

## BEDFORD AREA SCHOOL DISTRICT

| | |
|---|---|
| Superintendent | Dr. Allen Sell |
| Business Manager | Ms. Christina K. Robosson |
| Director of Technology | Ms. Judy Eller |
| Supervisor of Plant Operation | Mr. Mark Pennabaker |
| | |
| Principal, Elementary School | Ms. Leslie Turkovich |
| Principal, Middle School | Mr. Kevin Windows |
| Principal, High School | Mr. Kyle Kane |

## BEDFORD BOARD OF EDUCATION

| | |
|---|---|
| President | Mr. Thomas Bullington |
| Vice President | Mr. Jay Cessna |
| Treasurer | Mr. J. Roy Bence |
| | Mr. Deryl Clark |
| | Mr. D. Royce Coughenour |
| | Mrs. Emily Kendall |
| | Dr. Ronald Markwood |
| | Mr. William Ross |
| | Mr. H. Clay Thomas |
| Secretary, non-voting member | Mrs. Casey Cover |

# AUTHORS OF THE STUDY

## EI ASSOCIATES

### Mark S. Barnhardt, AIA, Senior Vice President, Principal-in-Charge

#### EDUCATION

Pennsylvania State University
Master of Architecture
Miami University
Bachelor of Environmental Design
Thaddeus Stevens State School of Technology
Associate Degree

#### EXPERIENCE

Mark Barnhardt has been with EI Associates for over 20 years. Over this period of time, Mark has developed a specialized interest in the design of educational facilities. He has managed and designed over a half billion dollars of school construction projects.

#### REGISTRATIONS

| | |
|---|---|
| Commonwealth of PA | License Number RA011059X |
| State of Maryland | License Number 0013190 |
| State of New Jersey | License Number 21AI01591200 |

Pennsylvania Society of Architects
Central Pennsylvania Society of Architects
AIA Committee of Educational Architecture
Council of Educational Facility Planners
US Green Building Council
Green Building Council of Central PA
Green Building County of the Delaware Valley

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### Ann D. Long, Project Manager, LEED AP BD&C

Education

Pennsylvania State University
Majored in Architecture and Architectural Engineering

Harrisburg Area Community College
AutoCad and 3-D Computer Design

### Andrew R. Blaydon, Architect, AIA

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Registration
Commonwealth of PA License Number RA406616

## NOTES