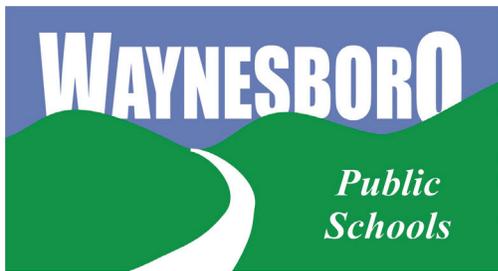


WAYNESBORO CITY PUBLIC SCHOOLS

Facilities Study

March 18, 2015

Final Report



Wenonah Elementary School
Berkeley Glenn Elementary School
Waynesboro High School



<u>Executive Summary</u>	
<u>Wenonah Elementary School - Additions & Renovations</u>	4
<u>Berkeley Glenn Elementary School - Additions & Renovations</u>	5
<u>Waynesboro High School - Phasing Options (Classroom wing/limited renovation)</u>	6
<u>Waynesboro High School - Gymnasium addition and Performing Arts addition & renovation</u>	7
<u>Waynesboro High School - All Additions & Renovations</u>	8
<u>Waynesboro Cost Estimates/Cost Inflation Summary</u>	
<u>Wenonah Elementary School</u>	
<u>Wenonah Elementary School Development Option</u>	20
<u>Berkeley Glenn Elementary School</u>	
<u>Berkeley Glenn Elementary School Development Options</u>	90
<u>Berkeley Glenn Elementary School Development Options</u>	91
<u>Berkeley Glenn Elementary School Development Options</u>	92
<u>Waynesboro High School</u>	
<u>Waynesboro High School Development Options</u>	164
<u>Waynesboro High School Development Options</u>	165
<u>Waynesboro High School Development Options</u>	166
<u>Waynesboro High School Development Options</u>	167
<u>Waynesboro High School Development Options</u>	168
<u>Waynesboro High School Development Options</u>	169

Executive Summary	1
Wenonah Elementary School	10
Existing Site Plan	11
Existing Plan	12
Space Comparison	15
School Development Option	19
Concept Site Plan	21
Concept Plan	22
Rendering	25
Civil Conditions Assessment	26
Civil Narrative	27
Architectural Narrative	33
Structural Narrative	38
Mechanical and Plumbing Narrative	45
Electrical Narrative	48
Facility Conditions Assessment	52
Architectural Conditions Assessment	55
Photographs of Conditions	58
Berkeley Glenn Elementary School	77
Existing Site Plan	78
Existing Plan	79
Space Comparison	80
School Development Option	89
Concept Site Plan - 400	93
Concept Plan - 400	94
Concept Site Plan - 660	95
Concept Plan - 660	96
Rendering	97
Civil Conditions Assessment	98
Civil Narrative	99
Architectural Narrative	105
Structural Narrative	109
Mechanical and Plumbing Narrative	115
Electrical Narrative	118
Facility Conditions Assessment	122
Architectural Conditions Assessment	125
Photographs of Conditions	128
Waynesboro High School	148
Existing Site Plan	149
Existing Plan	150
Space Comparison	153
School Development Option	163
Concept Site Plan	170
Concept Plan	171
Renderings	174
Civil Conditions Assessment	177
Civil Narrative	178
Architectural Narrative	184
Structural Narrative	189
Mechanical and Plumbing Narrative	202
Electrical Narrative	205
Facility Conditions Assessment	209
Architectural Conditions Assessment	211
Photographs of Conditions	220

Executive Summary

Facilities Study for Waynesboro City Public Schools

of

Wenonah Elementary School

Berkeley Glenn Elementary School

Waynesboro High School

March 18, 2015

Information regarding the subject schools:

- **Wenonah Elementary School**
 - Opened in 1976 (38 years)
 - Glass walls added between classrooms and corridors in 1997
 - Capacity of 335 students, grades K-5
 - Current enrollment is approximately 271 students
 - Site size 8.0 Acres
 - 58 parking spaces

- **Berkeley Glenn Elementary School**
 - Opened in 1968 (46 years)
 - Capacity of 361 students, grades K-5
 - Current enrollment is approximately 339 students
 - Site size 18.57 Acres
 - 78 parking spaces

- **Waynesboro High School**
 - Opened in 1938 (76 years)
 - Additions / renovations in 1950's, 1970's, and 2001
 - Capacity of approximately 950 students, grades 9-12 on block schedule
 - Current enrollment is approximately 855 students
 - Site size 19.22 Acres
 - 223 parking spaces

Background

In January, 2014, OWPR, Inc. was commissioned for a Facilities Study by Waynesboro City VA Public Schools (WCPS). Schools subject to the study are Wenonah Elementary School, Berkeley Glenn Elementary School, and Waynesboro High School. The study will be used by WCPS to inform conversations and decisions regarding capital improvement needs at the existing buildings and sites. This report presents factual data gathered from the following sources:

- Field assessments by OWPR design professionals
- Observation of morning drop-off and afternoon pick-up
- Review of existing building drawings
- Review of local ordinances, codes, and regulations
- VA Department of Education Guidelines
- Stakeholder meetings including:
 - School Board members
 - Superintendent
 - Assistant Superintendent
 - Directors and Coordinators for instruction and testing
 - Principals and administrative staff from each of the subject schools
 - Faculty and staff representatives from each of the subject schools
 - Maintenance staff

Building and Site Assessment

Professional staff from OWPR conducted assessments of existing conditions at each of the six schools. The finishes in each space and their condition were documented. The major building systems (Structural, Mechanical, Plumbing, and Electrical) were evaluated, and the school sites were evaluated for condition and function. Bus and car traffic were observed at morning drop-off and afternoon pick-up to identify deficiencies and safety considerations. These assessments were used to inform the renovation and addition options, and subsequently cost estimates for proposed work. Average life expectancies of building systems and components are defined by standards from the Building Owners and Managers Association International (BOMA) hand book. The BOMA document is a nationally recognized reference for property evaluations. When components were not found in the BOMA reference, average life expectancies were predicted based on professional judgment and experience.

Benchmarks for comparison

Since one of the aspects of the study is to determine where more space may be needed, or where additional spaces may be needed, OWPR first created programs of spaces for a new elementary school and a new high school. These “preferred” programs serve as benchmarks for comparison to the existing buildings and sites. The programs were shaped by the collective vision of stakeholders who defined what a 21st Century learning environment should be. Existing and anticipated curriculum, current planning guidelines from the VA Department of Education, and newer schools in Virginia were also considered as the programs were created.

21st Century Learners

Why is education and why are educational facilities different today than 40+ years ago, which is the average age of construction among the three schools? Aside from the myriad of services and initiatives that have been added as responsibilities of public education, today's students are digital natives. They don't consider "new technology" as new...it's all they know. In general, 21st Century learners are adept at multitasking and easily process information from several different sources at once. They are anywhere, experiential learners and thrive on collaborating with their peers during the learning process. This is evident today at Waynesboro High School, where you will see small groups of students sitting, working collaboratively in the corridor outside of their classroom. One term that can be used to describe 21st Century learning environments was echoed time and time again as we met with stakeholders. That term is "flexibility". To facilitate 21st Century learning our schools must be flexible to accommodate a wide variety of instructional and learning styles, class sizes, curriculum, and technologies. At the high school, small group, project based learning must be accommodated, as well as large group demonstrations. At the elementary schools, small spaces are necessary that can accommodate uses ranging from one-on-one instruction and assessment to early intervention. At all schools furnishings must provide comfort and flexibility for students of different sizes and ages to maximize student attentiveness. Furniture should allow students to easily rearrange classrooms to support the learning activity. Spaces and school sites must also accommodate public functions of various sizes and purposes. A one size fits all approach to school design is no longer acceptable. School buildings and their sites should enable the most effective approach to instruction and learning. In general, the three subject schools and their sites are more often barriers to the most effective approach to instruction and learning for today's student.

Proposed Solutions

OWPR has proposed development scenarios for each of the subject schools that offer solutions to issues identified in the study. Those issues include, but are not limited to, the following:

- Environments that do not support 21st Century instruction and learning
- Lack of space for student collaboration
- Classrooms that are too small
- Lack of space for small group instruction, individual testing, etc.
- Barriers to physical fitness and athletics
- Inadequate environments for visual and performing arts
- Inadequate infrastructure for Science
- Campus safety and security
- Additional parking
- Handicap accessibility
- Energy efficiency
- Antiquated systems
- Finishes past their useful life
- Functionality of spaces
- Classroom storage
- Lack of natural light

Estimated Costs

The current construction market in the region appears to have fully recovered from recession conditions. Commercial building costs are similar to, if not greater than, pre-recession values. Cost estimates are given as a range of potential costs and include pre-planning phase allowances for soft costs such as Fixtures, Furnishings, and Equipment, Design Fees, Contingency, etc. The estimates for new construction are based on recent new school construction costs in the region, recent bid data from OWPR archives, construction cost data bases, and a macro-level anticipated scope of work for each project. The presence of asbestos was confirmed at all subject buildings through review of the AHERA Asbestos Management Plans for each school. When asbestos is anticipated to be disturbed its abatement is considered in the cost estimates.

Unless otherwise noted, all cost estimates are based on the schools and sites being vacated during construction. If schools cannot be vacated, careful phasing must be considered to minimize disruption of the learning environment and to ensure student and staff safety. Oftentimes, this phasing is detrimental to the efficiency of construction, resulting in increased construction duration. The increased construction duration subsequently results in increased construction costs. Discussions of phasing and its effect on costs should be informed by project-specific conceptual designs and phasing plans. However, an increase in costs of 3%-10% is common, depending on how much of the building and site are made available to the contractor during each phase of construction.

All estimates assume a 2017 bid. Estimates should be increased by 3% per year after 2017 to anticipate probable cost increases and market volatility. Total project estimates are rounded for simplicity.

Wenonah Elementary School:

Additions & Renovations (335 student existing capacity)

46,600 sf of renovation (includes moderate site improvements)	\$7,950,000
2,180 sf support addition	\$530,000
11,000 sf gym addition	\$2,650,000

Total estimated cost of building and site work = \$11,130,000

A/E Design Fees @ 7.5%	\$834,750
Conceptual phase contingency @ 10%	\$1,113,000
Fixtures, Furnishings, and Equipment @15%	\$1,669,500

Total project estimated cost = \$14,750,000

Estimate assumptions, inclusions, and exclusions:

- 2017 Bid
- 20 month construction duration
- No offsite improvements
- Students are not in the building during construction

Berkeley Glenn Elementary School:

Additions & Renovations (400 student capacity)

54,200 sf of renovation (includes moderate site improvements)	\$9,222,000
15,575 sf classroom and gym addition	\$3,922,000
Brick repair	\$106,000

Total estimated cost of building and site work = \$13,250,000

A/E Design Fees @ 7.5%	\$993,750
Conceptual phase contingency @ 10%	\$1,325,000
Fixtures, Furnishings, and Equipment @15%	\$1,987,500

Total project estimated cost = \$17,500,000

Additions & Renovations (660 student capacity)

54,200 sf of renovation (includes moderate site improvements)	\$9,222,000
25,555 sf classroom and gym addition	\$6,360,000
8,200 sf classroom addition	\$2,014,000
Brick repair	\$106,000

Total estimated cost of building and site work = \$17,702,000

A/E Design Fees @ 7.5%	\$1,327,650
Conceptual phase contingency @ 10%	\$1,770,200
Fixtures, Furnishings, and Equipment @15%	\$2,655,300

Total project estimated cost = \$23,500,000

Estimate assumptions, inclusions, and exclusions:

- 2017 Bid
- 18 - 22 month construction duration
- No offsite improvements
- Students are not in the building during construction

New 90,000 sf Elementary School (660 Student Capacity) on unknown greenfield site

Total estimated cost of building and site work = \$22,260,000

A/E Design Fees @ 6%	\$1,335,600
Conceptual phase contingency @ 10%	\$2,226,000
Fixtures, Furnishings, and Equipment @15%	\$3,339,000

Total project estimated cost for a new

660 student elementary school = \$29,200,000

Estimate assumptions, inclusions, and exclusions:

- 2017 Bid
- No offsite improvements
- 18 month construction duration
- Site acquisition costs not included

Waynesboro High School:

Phasing Options

(Potential phases if all proposed renovations and additions are not combined as one project)

Classroom wing addition and site work at front of school

75,600 sf building addition (Classroom Wing)	\$18,868,000
43,500 sf of demolition (1970s Addition)	\$265,000
Parking and site circulation improvements (At front of building)	\$848,000
Detached toilet facility for outdoor athletics	\$424,000

Total estimated cost of building and site work = \$20,405,000

A/E Design Fees @ 7.5%	\$1,530,375
Conceptual phase contingency @ 10%	\$2,040,500
Fixtures, Furnishings, and Equipment @15%	\$3,060,750

Total project estimated cost of Classroom wing addition with no renovation = \$27,000,000

Estimate assumptions, inclusions, and exclusions:

- 2017 Bid
- 20 month construction duration
- No offsite improvements
- Students are not in the building during construction

Limited renovation of existing building

(not including 1970s wing, cafeteria, kitchen, gym, P.E. locker rooms, auditorium, stage, and chorus area)

Existing building renovation (not all areas) = \$3,975,000

A/E Design Fees @ 7.5%	\$298,125
Conceptual phase contingency @ 10%	\$397,500
Fixtures, Furnishings, and Equipment @15%	\$596,250

Total project estimated cost of limited building renovation = \$5,250,000

Estimate assumptions, inclusions, and exclusions:

- 2017 Bid
- 12 month construction duration
- No offsite improvements
- Students are not in the building during construction

Gymnasium addition

23,000 sf building addition	\$5,724,000
12,000 sf of demolition	\$106,000
4,500 sf of heavy renovation (PE Locker Rooms)	\$689,000
1,500 sf of light renovation (Student Commons)	\$127,200
Parking and site circulation improvements (Gym side)	\$212,000

Total estimated cost of building and site work = \$6,858,200

A/E Design Fees @ 7.5%	\$514,365
Conceptual phase contingency @ 10%	\$685,820
Fixtures, Furnishings, and Equipment @15%	\$1,028,730

Total project estimated cost of Gymnasium addition = \$9,100,000

Estimate assumptions, inclusions, and exclusions:

- 2017 Bid
- 16 month construction duration
- No offsite improvements
- Student parking and bus loop will be occupied by construction
- Students will be lose use of the gymnasium, P.E. locker rooms, team rooms, and student entrance for one school year

Performing Arts addition and renovation

4,000 sf building addition	\$1,060,000
12,500 sf of heavy renovation (auditorium, stage, and chorus area)	\$1,908,000
Theatrical equipment, lighting, and sound	\$477,000
Brick repair	\$53,000

Total estimated cost of building and site work = \$3,498,000

A/E Design Fees @ 7.5%	\$262,350
Conceptual phase contingency @ 10%	\$349,800
Fixtures, Furnishings, and Equipment @15%	\$524,700

Total project estimated cost of Performing Arts addition and renovation = \$4,600,000

Estimate assumptions, inclusions, and exclusions:

- 2017 Bid
- 16 month construction duration
- No offsite improvements
- Faculty parking will be disrupted

- Students will be lose use of the auditorium, stage and chorus area for one school year

All WHS additions and renovations (all phases listed above)

75,600 sf building addition (Classroom Wing)	\$18,868,000
43,500 sf of demolition (1970s Addition)	\$265,000
Existing building renovation (except cafeteria, kitchen, main gym, PE locker room areas, stage, auditorium, and Chorus area)	\$3,975,000
Parking and site circulation improvements	\$1,060,000
Detached toilet facility for outdoor athletics	\$424,000
23,000 sf building addition (Gym)	\$5,724,000
12,000 sf of demolition (Gym)	\$106,000
4,500 sf of heavy renovation (P.E. locker rooms)	\$689,000
1,500 sf of light renovation (Student Commons)	\$127,200
4,000 sf building addition (Performing Arts)	\$1,060,000
12,500 sf of heavy renovation (Auditorium, stage, and chorus area)	\$1,908,000
Theatrical equipment, lighting, and sound	\$477,000
Brick repair at auditorium	\$53,000
Total estimated cost of building and site work = \$34,736,200	
A/E Design Fees @ 7.5%	\$2,605,215
Conceptual phase contingency @ 10%	\$3,473,620
Fixtures, Furnishings, and Equipment @15%	\$5,210,430

Total project estimated cost for all WHS additions and renovations = \$46,000,000

Estimate assumptions, inclusions, and exclusions:

- 2017 Bid
- 22 month construction duration
- No offsite improvements
- Students are not in the building during construction

New 221,000 sf Waynesboro High School on unknown greenfield site

Total estimated cost of building and site work = \$56,200,000

A/E Design Fees @ 6%	\$3,370,800
Conceptual phase contingency @ 10%	\$5,618,000
Fixtures, Furnishings, and Equipment @15%	\$8,427,000

Total project estimated cost for a new Waynesboro High School = \$73,600,000

Estimate assumptions, inclusions, and exclusions:

- 2017 Bid
- 24 month construction duration
- No offsite improvements
- Site acquisition costs not included
- Assumes new outdoor athletic facilities

We would like to express our appreciation to everyone that took time to speak with us and enable the research necessary to create this report. We would also like to express our appreciation to Waynesboro City Public Schools and Waynesboro City Town Council for giving OWPR the opportunity to work with you.

A handwritten signature in blue ink, appearing to read 'J.D. Price', with a long horizontal stroke extending to the right.

J.D. Price, AIA

Vice-President, OWPR, Inc

Projected 3% annual inflation of construction costs for elementary school development scenarios

Wenonah Elementary Additions & Renovations (335 student existing capacity)			
Year Bid	Estimated Construction Cost (3% per year cost increase)	Soft costs as 32.5% of construction cost	Total project estimated cost
2017	\$11,130,000	\$3,617,250	\$14,747,250
2018	\$11,463,900	\$3,725,768	\$15,189,668
2019	\$11,807,817	\$3,837,541	\$15,645,358
2020	\$12,162,052	\$3,952,667	\$16,114,718
2021	\$12,526,913	\$4,071,247	\$16,598,160
2022	\$12,902,720	\$4,193,384	\$17,096,105
2023	\$13,289,802	\$4,319,186	\$17,608,988
2024	\$13,688,496	\$4,448,761	\$18,137,257
2025	\$14,099,151	\$4,582,224	\$18,681,375
2026	\$14,522,126	\$4,719,691	\$19,241,816
2027	\$14,957,789	\$4,861,282	\$19,819,071
2028	\$15,406,523	\$5,007,120	\$20,413,643
2029	\$15,868,719	\$5,157,334	\$21,026,052
2030	\$16,344,780	\$5,312,054	\$21,656,834

Berkeley Glenn Elementary Additions & Renovations (660 student capacity)			
Year Bid	Estimated Construction Cost (3% per year cost increase)	Soft costs as 32.5% of construction cost	Total project estimated cost
2017	\$17,702,000	\$5,753,150	\$23,455,150
2018	\$18,233,060	\$5,925,745	\$24,158,805
2019	\$18,780,052	\$6,103,517	\$24,883,569
2020	\$19,343,453	\$6,286,622	\$25,630,076
2021	\$19,923,757	\$6,475,221	\$26,398,978
2022	\$20,521,470	\$6,669,478	\$27,190,947
2023	\$21,137,114	\$6,869,562	\$28,006,676
2024	\$21,771,227	\$7,075,649	\$28,846,876
2025	\$22,424,364	\$7,287,918	\$29,712,282
2026	\$23,097,095	\$7,506,556	\$30,603,651
2027	\$23,790,008	\$7,731,753	\$31,521,760
2028	\$24,503,708	\$7,963,705	\$32,467,413
2029	\$25,238,819	\$8,202,616	\$33,441,435
2030	\$25,995,984	\$8,448,695	\$34,444,679

Berkeley Glenn Elementary Additions & Renovations (400 student capacity)			
Year Bid	Estimated Construction Cost (3% per year cost increase)	Soft costs as 32.5% of construction cost	Total project estimated cost
2017	\$13,250,000	\$4,306,250	\$17,556,250
2018	\$13,647,500	\$4,435,438	\$18,082,938
2019	\$14,056,925	\$4,568,501	\$18,625,426
2020	\$14,478,633	\$4,705,556	\$19,184,188
2021	\$14,912,992	\$4,846,722	\$19,759,714
2022	\$15,360,381	\$4,992,124	\$20,352,505
2023	\$15,821,193	\$5,141,888	\$20,963,081
2024	\$16,295,829	\$5,296,144	\$21,591,973
2025	\$16,784,704	\$5,455,029	\$22,239,732
2026	\$17,288,245	\$5,618,680	\$22,906,924
2027	\$17,806,892	\$5,787,240	\$23,594,132
2028	\$18,341,099	\$5,960,857	\$24,301,956
2029	\$18,891,332	\$6,139,683	\$25,031,015
2030	\$19,458,072	\$6,323,873	\$25,781,945

New Elementary School on greenfield site (660 student capacity)			
Year Bid	Estimated Construction Cost (3% per year cost increase)	Soft costs as 31% of construction cost	Total project estimated cost
2017	\$22,260,000	\$6,900,600	\$29,160,600
2018	\$22,927,800	\$7,107,618	\$30,035,418
2019	\$23,615,634	\$7,320,847	\$30,936,481
2020	\$24,324,103	\$7,540,472	\$31,864,575
2021	\$25,053,826	\$7,766,686	\$32,820,512
2022	\$25,805,441	\$7,999,687	\$33,805,128
2023	\$26,579,604	\$8,239,677	\$34,819,281
2024	\$27,376,992	\$8,486,868	\$35,863,860
2025	\$28,198,302	\$8,741,474	\$36,939,776
2026	\$29,044,251	\$9,003,718	\$38,047,969
2027	\$29,915,579	\$9,273,829	\$39,189,408
2028	\$30,813,046	\$9,552,044	\$40,365,090
2029	\$31,737,437	\$9,838,606	\$41,576,043
2030	\$32,689,560	\$10,133,764	\$42,823,324

Projected 3% annual inflation of construction costs for high school development scenarios

Waynesboro High School classroom wing addition & site work at front of school

Year Bid	Estimated Construction Cost (3% per year cost increase)	Soft costs as 32.5% of construction cost	Total project estimated cost
2017	\$20,405,000	\$6,631,625	\$27,036,625
2018	\$21,017,150	\$6,830,574	\$27,847,724
2019	\$21,647,665	\$7,035,491	\$28,683,155
2020	\$22,297,094	\$7,246,556	\$29,543,650
2021	\$22,966,007	\$7,463,952	\$30,429,960
2022	\$23,654,987	\$7,687,871	\$31,342,858
2023	\$24,364,637	\$7,918,507	\$32,283,144
2024	\$25,095,576	\$8,156,062	\$33,251,638
2025	\$25,848,444	\$8,400,744	\$34,249,188
2026	\$26,623,897	\$8,652,766	\$35,276,663
2027	\$27,422,614	\$8,912,349	\$36,334,963
2028	\$28,245,292	\$9,179,720	\$37,425,012
2029	\$29,092,651	\$9,455,112	\$38,547,762
2030	\$29,965,430	\$9,738,765	\$39,704,195

Waynesboro High School gymnasium addition

Year Bid	Estimated Construction Cost (3% per year cost increase)	Soft costs as 32.5% of construction cost	Total project estimated cost
2017	\$6,858,200	\$2,228,915	\$9,087,115
2018	\$7,063,946	\$2,295,782	\$9,359,728
2019	\$7,275,864	\$2,364,656	\$9,640,520
2020	\$7,494,140	\$2,435,596	\$9,929,736
2021	\$7,718,965	\$2,508,663	\$10,227,628
2022	\$7,950,533	\$2,583,923	\$10,534,457
2023	\$8,189,049	\$2,661,441	\$10,850,491
2024	\$8,434,721	\$2,741,284	\$11,176,005
2025	\$8,687,763	\$2,823,523	\$11,511,285
2026	\$8,948,395	\$2,908,229	\$11,856,624
2027	\$9,216,847	\$2,995,475	\$12,212,323
2028	\$9,493,353	\$3,085,340	\$12,578,692
2029	\$9,778,153	\$3,177,900	\$12,956,053
2030	\$10,071,498	\$3,273,237	\$13,344,735

Waynesboro High School limited renovation of existing building

Year Bid	Estimated Construction Cost (3% per year cost increase)	Soft costs as 32.5% of construction cost	Total project estimated cost
2017	\$3,975,000	\$1,291,875	\$5,266,875
2018	\$4,094,250	\$1,330,631	\$5,424,881
2019	\$4,217,078	\$1,370,550	\$5,587,628
2020	\$4,343,590	\$1,411,667	\$5,755,257
2021	\$4,473,898	\$1,454,017	\$5,927,914
2022	\$4,608,114	\$1,497,637	\$6,105,752
2023	\$4,746,358	\$1,542,566	\$6,288,924
2024	\$4,888,749	\$1,588,843	\$6,477,592
2025	\$5,035,411	\$1,636,509	\$6,671,920
2026	\$5,186,473	\$1,685,604	\$6,872,077
2027	\$5,342,068	\$1,736,172	\$7,078,240
2028	\$5,502,330	\$1,788,257	\$7,290,587
2029	\$5,667,400	\$1,841,905	\$7,509,304
2030	\$5,837,422	\$1,897,162	\$7,734,584

Waynesboro High School performing arts addition and renovation

Year Bid	Estimated Construction Cost (3% per year cost increase)	Soft costs as 32.5% of construction cost	Total project estimated cost
2017	\$3,498,000	\$1,136,850	\$4,634,850
2018	\$3,602,940	\$1,170,956	\$4,773,896
2019	\$3,711,028	\$1,206,084	\$4,917,112
2020	\$3,822,359	\$1,242,267	\$5,064,626
2021	\$3,937,030	\$1,279,535	\$5,216,565
2022	\$4,055,141	\$1,317,921	\$5,373,061
2023	\$4,176,795	\$1,357,458	\$5,534,253
2024	\$4,302,099	\$1,398,182	\$5,700,281
2025	\$4,431,162	\$1,440,128	\$5,871,289
2026	\$4,564,097	\$1,483,331	\$6,047,428
2027	\$4,701,019	\$1,527,831	\$6,228,851
2028	\$4,842,050	\$1,573,666	\$6,415,716
2029	\$4,987,312	\$1,620,876	\$6,608,188
2030	\$5,136,931	\$1,669,503	\$6,806,433

Projected 3% annual inflation of construction costs for high school development scenarios

All Waynesboro High School additions and renovations

Year Bid	Estimated Construction Cost (3% per year cost increase)	Soft costs as 32.5% of construction cost	Total project estimated cost
2017	\$34,736,200	\$11,289,265	\$46,025,465
2018	\$35,778,286	\$11,627,943	\$47,406,229
2019	\$36,851,635	\$11,976,781	\$48,828,416
2020	\$37,957,184	\$12,336,085	\$50,293,268
2021	\$39,095,899	\$12,706,167	\$51,802,066
2022	\$40,268,776	\$13,087,352	\$53,356,128
2023	\$41,476,839	\$13,479,973	\$54,956,812
2024	\$42,721,145	\$13,884,372	\$56,605,517
2025	\$44,002,779	\$14,300,903	\$58,303,682
2026	\$45,322,862	\$14,729,930	\$60,052,793
2027	\$46,682,548	\$15,171,828	\$61,854,376
2028	\$48,083,025	\$15,626,983	\$63,710,008
2029	\$49,525,515	\$16,095,792	\$65,621,308
2030	\$51,011,281	\$16,578,666	\$67,589,947

New Waynesboro High School on unknown greenfield site

Year Bid	Estimated Construction Cost (3% per year cost increase)	Soft costs as 31% of construction cost	Total project estimated cost
2017	\$56,200,000	\$17,422,000	\$73,622,000
2018	\$57,886,000	\$17,944,660	\$75,830,660
2019	\$59,622,580	\$18,483,000	\$78,105,580
2020	\$61,411,257	\$19,037,490	\$80,448,747
2021	\$63,253,595	\$19,608,614	\$82,862,210
2022	\$65,151,203	\$20,196,873	\$85,348,076
2023	\$67,105,739	\$20,802,779	\$87,908,518
2024	\$69,118,911	\$21,426,862	\$90,545,774
2025	\$71,192,479	\$22,069,668	\$93,262,147
2026	\$73,328,253	\$22,731,758	\$96,060,011
2027	\$75,528,101	\$23,413,711	\$98,941,812
2028	\$77,793,944	\$24,116,122	\$101,910,066
2029	\$80,127,762	\$24,839,606	\$104,967,368
2030	\$82,531,595	\$25,584,794	\$108,116,389