ACT 34 HEARING BOOKLET

Wilkes-Barre Area School District

730 South Main Street, Wilkes-Barre, PA 18702



Concerning the construction of a

New High School

Date: October 29, 2018

Time: 6:00 P.M. Location: Cafeteria

Leo E. Solomon - Plains Memorial Junior High School

43 Abbott Street

Plains Township, PA 18705

WILKES-BARRE AREA SCHOOL DISTRICT

730 South Main Street, Wilkes-Barre, PA 18711-0376

Board of School Directors

Joseph A. Caffrey President
Reverend Shawn Walker Vice-President

Ned J. Evans Dino L. Galella Denise T. Thomas John R. Quinn Dr. James F. Susek James Geiger Melissa Patla

District Administration

Dr. Brian Costello Superintendent

Patricia D. Wallace Administrative Assistant to the Superintendent
Dr. Rochelle Koury Director of Administrative & Student Services
Michele A. Williams Director of Federal & State Educational Programs

Frank Castano Director of Human Resources

Dr. Robert Makaravage Director of Special Education & Instruction

Brian Lavan Director of Police Operations

Thomas F. Telesz Secretary Raymond P. Wendolowski, Esq. Solicitor

Financial Advisor

Michael Judge CaseCon Capital, Inc.

Underwriter

David M. Payne, Jr. PNC Capital Markets LLC

Director

PUBLIC HEARING AGENDA

 OPENING REMARKS Dr. Brian Costello

Superintendent of Schools

 HEARING DULY CONSTITUTED LEGAL DOCUMENTS

Raymond P. Wendolowski, Esquire

PROJECT HISTORY, NEED, OPTIONS

 ARCHITECTURAL REVIEW AND PROJECT FEATURES

EFFECT OF DIRECT AND

Michael Judge INDIRECT COSTS ON TAX BASE CaseCon Capital, Inc.

> David Payne Director

PNC Capital Markets LLC

PUBLIC COMMENT AND CLARIFICATION Raymond P. Wendolowski, Esquire

Procedures:

- i. All individuals wishing to speak at today's hearing shall sign-in by 5:55 P.M.
- ii. When called upon, the individual shall state name and address.
- iii. Statements and comments shall be limited to a maximum time of three minutes. Such time will include any discussion between the individual and a District representative.
- iv. Statements or comments shall not be intentionally repeated.
- v. Additional written comments may be filed with the School District or with the Pennsylvania Department of Education for thirty days following today's hearing.
- ADJOURNMENT

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Section 0 - Introduction

INTRODUCTION:

The Board of School Directors of the Wilkes-Barre Area School District provides this booklet to inform residents of the District and to describe the plans for the construction of a new high school.

This booklet includes a review of the Project. It describes options considered, features of the proposed Project, a cost analysis, an estimate of state reimbursement, and potential debt service.

<u>Section 1 – Legal Documents</u>

RESOLUTION

BOARD OF SCHOOL DIRECTORS WILKES-BARRE AREA SCHOOL DISTRICT

ADOPTING A MAXIMUM PROJECT COST AND A MAXIMUM BUILDING CONSTRUCTION COST FOR PROJECTS INVOLVING THE CONSTRUCTION OF A NEW HIGH SCHOOL AND AUTHORIZING OTHER ACTION IN CONNECTION THEREWITH

WHEREAS, the Public School Code of 1949, as amended and supplemented, including those made by Act 34, approved June 27, 1973 (the "School Code"), requires, among other things, that a public hearing be held on all new construction and substantial additions to existing school buildings; and

WHEREAS, the Wilkes-Barre Area School District (the "School District") has resolved to undertake the construction of a new high school (the "Project"); and

WHEREAS, the Board of School Directors of the School District proposes to adopt a maximum project cost and maximum building construction cost for the Project; and

WHEREAS, the Board of School Directors of the School District intends to conduct a public hearing to inform the residents of the School District with respect to the Project.

NOW, THEREFORE, BE IT RESOLVED THAT:

- 1. The Board of School Directors of the School District hereby adopts a maximum project cost of \$137,318,879 and a maximum building construction cost of \$103,652,234 in connection with the Project.
- 2. The Board of School Directors of the School District hereby authorizes and directs a public hearing to be held in accordance with the requirements of Act 34 of the School Code on October 29, 2018, to provide information to the residents of the School District with respect to the Project. The Secretary of the School District is hereby authorized and directed to advertise the Notice of Public Hearing in substantially the form set forth in Exhibit A attached hereto, in accordance with the requirements of Act 34 and Public School Code of 1949, as amended. Such public hearing shall be published not less than 20 days prior to the date of the public hearing stated above.
- 3. The Board of School Directors of the School District authorizes and approves the preparation of a description of the Project (the "Booklet") in accordance with resolutions of the Board and upon approval by the Solicitor and Superintendent, the Board of School Directors of the School District hereby directs the Secretary of the School District to make copies of the Booklet available to residents no later than 20 days prior to the date of the public hearing stated above, and on each business day thereafter between the hours of 9:00 A.M. and 4:00 P.M. at the School District Administration Office, 730 South Main Street, Wilkes-Barre, Pennsylvania, 18711. The Board of School Directors of the School District further authorizes the use and distribution of the Booklet as required by the School Code.

- 4. The Board of School Directors of the School District hereby authorizes and directs the proper officer of the School District to submit to the Pennsylvania Department of Education (the "Department") a certified copy of this Resolution, together with a copy of the minutes or transcript of the aforementioned public hearing, a proof of publication of the notice thereof and a complete description of the Project, all as required by the School Code, as well as any other documents required by the Department in connection therewith.
- 5. The Board of School Directors of the School District hereby authorizes and directs its (i) administrative staff; (ii) Bond Counsel; (iii) Solicitor Raymond P. Wendolowski, Esquire; (iv) Architect; (v) Underwriter; and (vi) Financial Advisor; to do and perform or cause to be done and performed on behalf of the School District any and all acts and things as may be necessary in connection with the Project in order to carry out the purposes of the School Code and this Resolution.
- 6. The proper officers of the School District are hereby authorized and directed to execute any and all papers and to do and cause to be done any and all acts and things necessary or proper for the execution or carrying out of this Resolution.
- 7. All resolutions or parts of resolutions inconsistent herewith are hereby rescinded, canceled, and annulled.
- 8. The Board of School Directors of the School District hereby approves, ratifies, and confirms all action taken in connection with the Project.

I, the undersigned Secretary of the Wilkes-Barre Area School District, DO HEREBY CERTIFY that the foregoing is a true and correct copy of a Resolution duly adopted by the affirmative vote of a majority of the members of the Board of School Directors of the School District at a public meeting held on October 4, 2018, that proper notice of such meeting was duly given as required by law; and the said Resolution has been duly entered upon the Minutes of said Board, showing how each member voted thereon.

IN WITNESS WHEREOF, I have hereunto set my signature as such official and affixed the seal of the Wilkes-Barre Area School District this 4th day of October, 2018.

Thomas F. Telesz Date
Secretary

This certifies that the above Resolution was approved by the Board of Directors of the Wilkes-Barre Area School District as follows:

BOARD ACTION DATE: October 4, 2018

Roll call vote: Aye <u>6</u> Nay ____ Abstentions ____ Absent __\

CERTIFICATE

I, the undersigned, Secretary of the Wilkes-Barre Area School District, Luzerne County, Pennsylvania (the "School District"), certify: that the foregoing is a true and correct copy of a Resolution which was duly adopted by affirmative vote of a majority of all members of the Board of School Directors of the School District duly convened and held according to law on October 4, 2018 at which meeting a quorum was present; that said Resolution has been duly recorded in the Minutes of the Board of School Directors of the School District; and that said Resolution is in full force and effect without amendment, alternation or repeal, as of the date of this Certificate.

I further certify that the Board of School Directors of the School District met the advance notice requirements of the Sunshine Act, Act No. 1986-84 of the General Assembly of the Commonwealth of Pennsylvania, approved July 3, 1986, by advertising said meeting and by posting prominently a notice of said meeting at the principal office of the School District or at the public building in which said meeting was held, all in accordance with such Act.

IN WITNESS THEREOF, I set my hand and affix the official seal of the Wilkes-Barre Area School District, this 4th day of October, 2018.

Secretary

10-4-15

Date

EXHIBIT A:

NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that a public hearing will be held by the Board of School Directors of the WILKES-BARRE AREA SCHOOL DISTRICT, Luzerne County, Pennsylvania (the "School District"), at 6:00 p.m., prevailing time, <u>October 29, 2018</u>, in the Cafeteria at the Leo E. Solomon - Plains Memorial Junior High School, 43 Abbott Street, Plains Township, Pennsylvania.

The purpose of the hearing is to inform the residents of the School District and to review all relevant matters relating to the proposed plan for the construction of a new high school.

A description of the Project will be presented and will be available for review and consideration by residents of the School District in booklet form no later than October 9, 2018, and on each regular business day thereafter between the hours of 9:00 A.M. and 4:00 P.M. at the School District Administration Office, 730 South Main Street, Wilkes-Barre, Pennsylvania, 18711.

The Board of School Directors of the School District by resolution duly adopted has authorized a "maximum project cost" of \$137,318,879 and a "maximum building construction cost" of \$103,652,234 in connection with the Project. This public hearing is being held pursuant to requirements of the Pennsylvania Public School Code of 1949, approved March 10, 1949, as amended and supplemented, including amendments made pursuant to Act 34 of the Session of 1973 of the General Assembly.

A resident of the School District wishing agenda time for the purpose of discussing the proposed Project should submit a written request to the School District no later than 4:00 P.M. on October 26, 2018. Such request should be submitted to the undersigned, and include the name and address of the person submitting the request and a statement of the topic to be presented. Agenda time shall be limited to three (3) minutes. A resident of the School District may submit written testimony regarding the Project no later than 4:00 P.M. on October 26, 2018. Such written testimony should be submitted to the undersigned and include the name and address of the person submitting the testimony. Testimony from those who do not receive agenda time will be received from the floor at the hearing. Such testimony shall be limited to three (3) minutes.

Written comments regarding the Project will be received by the secretary of the Board of School Directors until 4:00 P.M., November 29, 2018.

Thomas F. Telesz, Secretary Wilkes-Barre Area School District 730 South Main Street Wilkes-Barre, PA 18711

<u>Section II –</u> <u>Project History and Educational Need</u>

PROJECT HISTORY:

In August 2014 Wilkes-Barre Area School District authorized a District-Wide Facility Study with a focus on developing options to address facility and educational deficiencies associated with its secondary centers. The District created a Study Team including Board Members and Administration, retained a construction manager, Apollo Group, Inc., and retained the architectural team of A+E Group JV, Borton-Lawson Architecture, TGL Engineering, Inc., and Williams Kinsman Lewis Architecture, P.C. (hereinafter, Team) to assist the District in the endeavor.

Initial Study & Revisions:

The initial Study was accepted and adopted by the District on December 8, 2014. In June 2015 the District authorized the Study Team to amend and update the initial Study. The Study Team amended the initial Study and issued a revised and updated study in its entirety. This revision, hereinafter referred to as Revision 1, was adopted and accepted on June 29, 2015. In April 2016 the District authorized the Study Team to amend and update the initial Study and Revision 1. The Study Team amended the initial Study and Revision 1 and issued revised sections, hereinafter collectively referred to as Revision 2, on May 11, 2016.

The initial Study and Revisions 1 and 2 were developed as a tool to assist the District in its planning and decision-making. As part of the Study and Revisions, the Team conducted interviews with Board members, administration, and staff. Facilities were evaluated based on a multitude of factors including for example, architectural, structural, mechanical, electrical, plumbing and fire protection system assessments; universal accessibility; educational programming; building capacity; enrollment projections; vehicular and pedestrian circulation; historical use patterns; and building codes.

A series of options were developed to respond to deficiencies identified as part of the study process and to address District goals. The options were refined after review with Board members and district administration.

On May 11, 2015 the District authorized a new high-school for grades 9-12.

EDUCATIONAL NEED FOR THE PROJECT:

Background:

Other than the renovations to the Edward Mackin school in 2016, the District has not had a new building or a major renovation project completed in the District since the Leo E. Solomon-Plains Memorial Elementary and Junior High School project was completed in 1996. The average age of the District's facilities is 65 years. The District currently operates five (5) K-6 elementary schools, one (1) 7-8 middle school, two (2) 7-12 Jr./Sr. High Schools, one (1) 9-10 high school, and one (1) 9-12 high school. A summary of the District's buildings is recited on PlanCon A09.

Other than the Edward Mackin School, all of the remaining buildings need repairs and renovations to upgrade the facilities to current standards for continued use. Code

deficiencies and accessibility compliance issues exist throughout the District's buildings. Many schools have undersized classrooms, overcrowded classrooms, are hindered by insufficient electrical and data systems, have insufficient mechanical systems, and are not handicapped accessible. In addition, the schools do not provide adequate space and space relationships to meet contemporary educational standards or the District's educational programming requirements.

Enrollment Growth:

The average current size for each grade level ranges from 508 to 566 students with an average of 531 students per grade. Between 2019 and 2026 the PDE projections indicate a 7.8% increase in enrollment in grades 9-12.

PDE enrollment projections for the Wilkes-Barre Area School District are reproduced in Table 3.1. The projections are based on actual enrollments for December 2016. Projections through 2025-2026 are listed.

District administration and personnel have indicated that, in general, they feel the District enrollment is growing. Interviews with District administration and personnel revealed a consensus that the PDE enrollment projections appear likely to occur.

District Board and administration have indicated that the current school facilities are inadequate to accommodate the projected growth and that the Project should provide a design capacity for the current average enrollment per grade level plus an amount for growth.

Current Building Conditions:

The existing high school facilities have significant building deficiencies that make it difficult for the buildings to support the District's educational program. James M. Coughlin High School was closed due to safety issues and code deficiencies. Elmer L. Meyers Jr./Sr. High School and G.A.R. Jr./Sr. High School have systems that fail to comply with current codes and are energy inefficient. Meyers, in particular, has building systems that have exceeded expected life expectancies, would be expensive to replace, and are obsolete. A summary of the deficiencies follows. Please refer to the feasibility study for a comprehensive summary of building deficiencies.

Elmer L. Meyers Junior/Senior High School:

The building continues to serve grades 7-12 through an expensive on-going maintenance program. In recent years areas of the roof and portions of the water supply system to the building have been replaced; however, the building has not had significant renovations since it was originally constructed.

The building in its current configuration does not accommodate the District's educational program. Classrooms are undersized, toilet facilities are inadequate, and accessibility standards are not compliant with code. The District's educational programs cannot be accommodated without significant renovations to the space that would impact structural systems.

Deficient items include:

- Windows have poor infiltration characteristics, poor operating functionality, and sub-standard insulating values
- Window caulking is failing
- Facades exhibit spalling and cracking
- Masonry, stone, and terra cotta veneers, headers, sills, and cornices are in poor condition and exhibit areas of deterioration and water infiltration
- Door hardware is not compliant with current accessibility standards
- Exit doors are not compliant with current accessibility widths
- Stair railings and guardrails are not compliant with current code
- Signage is not compliant with American with Disability Act (ADA) standards
- Toilet rooms are not compliant with ADA standards
- Interior finishes including flooring, ceilings, and walls show signs of the building's heavy use and are in need of repair and re-finishing
- Mechanical systems are obsolete and in need of complete replacement
- Mechanical ventilation is not compliant with current code
- Electrical systems are obsolete and in need of complete replacement
- Plumbing systems are obsolete and in need of complete replacement
- Select electrical equipment and lighting are in need of replacement
- Fire alarm pull stations are incorrectly mounted and there are no visual strobes for the hearing impaired
- The building is deficient in exit signage
- General purpose receptacles are inadequate and not compliant with current code
- Occupancy sensors should be added where appropriate to enhance energy efficiency
- Plumbing fixtures should be replaced with equivalent low-flow fixtures
- Site pavement and walks are in poor condition and entrances do not meet current accessibility standards
- Site walls and retaining walls exhibit areas of deterioration, cracking, and spalling
- Track has deteriorated and exhibits areas where the surface has detached from the asphalt base
- Security systems should be supplemented
- Kitchen equipment should be replaced and supplemented
- The gymnasium is undersized and inadequate to satisfactorily serve the current enrollment
- 67% of classrooms are below PDE's minimum area requirement of 660 SF
- Science labs are obsolete and do not have contemporary lab equipment
- Small group instruction areas should be provided
- Itinerant instruction areas should be provided
- Large group instruction areas should be provided
- Long distance learning areas should be provided
- Parking facilities are insufficient

G.A.R. Junior/Senior High School:

The building continues to serve grades 7-12 through an expensive on-going maintenance program. In recent years portions of the mechanical HVAC system

have been replaced; however, the building has not had comprehensive renovations in several decades.

Deficient items include:

- Accessibility standards are not compliant with code.
- Windows have poor infiltration characteristics, poor operating functionality, and sub-standard insulating values
- Masonry, stone, and terra cotta veneers, headers, sills, and cornices exhibit areas of deterioration and water infiltration
- Door hardware is not compliant with current accessibility standards
- Stair railings and guardrails are not compliant with current code
- Signage is not compliant with American with Disability Act (ADA) standards
- Toilet rooms are not compliant with ADA standards
- Interior finishes including flooring, ceilings, and walls show signs of the building's heavy use and are in need of repair and re-finishing
- Portions of the mechanical systems are obsolete and in need of replacement
- Mechanical ventilation is not compliant with current code
- Portions of the mechanical controls are antiquated and should be replaced
- Portions of the electrical systems are obsolete and in need of replacement
- Portions of the plumbing systems are obsolete and in need of replacement
- Select electrical equipment and lighting are in need of replacement
- Fire alarm pull stations are incorrectly mounted and there are no visual strobes for the hearing impaired
- The building is deficient in exit signage
- General purpose receptacles are inadequate and not compliant with current code
- Occupancy sensors should be added where appropriate to enhance energy efficiency
- Plumbing fixtures should be replaced with equivalent low-flow fixtures
- Site walls, stairs, and retaining walls exhibit areas of deterioration, cracking, and spalling
- Site railings and guardrails should be replaced
- Security systems should be supplemented
- All exterior wall masonry should be repointed
- Limestone and brick parapets and limestone cornice should be rebuilt
- Limestone and steel lintels should be replaced and added in areas where deficient
- Lateral supports should be provided at cornice
- Terra cotta cladding should be removed and replaced
- Additional Science labs should be provided
- Small group instruction areas should be provided
- Itinerant instruction areas should be provided
- Large group instruction areas should be provided
- Long distance learning areas should be provided

District Recommendations:

Based on the building deficiencies, the inability of the buildings to adequately accommodate the District's educational program and the District's enrollment growth, and in consideration of the District's finances, the District intends to construct a new consolidated high school for the District's 9-12 student population.

District Administration directed the Architect to assist the District with developing a space program. The program incorporates the District's space needs into the new facility. The Program is based on the District's curriculum goals over the next ten to twenty years. District administration considered the current and projected enrollment; its educational programs' objectives; the number, grouping, and nature of the students enrolled in the facility; spatial relationships within the facility and surrounding site; interrelationships between various programs and activities; technological advances; and other provisions that would improve the learning environment and promote educational effectiveness and staff efficiency.

EXHIBIT B:

D istrict/CTC:	5	UMMA			BUILDINGS AND LAND			Grades:		
Wilkes-Barre Area School Di	strict		ProjectN New H		ool - Plains Townshi	p		G Lades.	9	- 12
		PRES	ENT	-		- E	LANNE	D		
#1	#2	#3	# 4	#5	# 6	#7	#8	# 9	# 10	# 11
NAM E OF BULDING OR SITE (NCLUDING DAO AND VACANTIAND) OWNED BY SCHOOLD STRUT/CITC	CONSTRUCTION AND/OR RENOVATION DATES (BID OPENING DATES)	SITE SIZE (ACRES)	GRADE LEVELS	BUILDING FTE	CONVERSON / DEPOSITON AND PLANNED COMPLETION DATE BASED ON OPTON CHOSEN	SITE SIZE (ACRES)	GRADE LEVELS	PLANNED BUILDING FTE	PDE PROJECTED GRADE LEVEL ENROLIMENT 10 YEARS INTO THE FUTURE	FTE MINUS ENROLIMENT (#9 - #10)
Boyd Dodson Elementary Daniel J Flood Elementary Heights Murray Elementary Dr. David Kistler Elementary Solomon Plains Elementary Edward Mackin School	1937/84 1968 1976 1975 1996 1937/2015	1.4 8.1 7.5 7.1 35.5 1.1	K-6 K-6 K-6 K-6 K-6	125 600 800 1,025 925 493	Maintain Maintain Maintain Maintain Maintain Conversion (2021 or later)	1.4 8.1 7.5 7.1 35.5	K-6 K-6 K-6 K-6 K-6	125 600 800 1,025 925 475	XXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXX	XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXX
Subtotal	XXXXXXXXX	XXX	XXXX	3,968	xxxxxxxxxxxxxxxxxx	XXX	XXXX	3,950	4,384	(434)
Solomon Plains Middle School ** Solomon schools share the same si GAR Jr/Sr High	1996 te. 1925/79	4.4	7-8 7-12	698 1,117	Maintain Conversion (2021 or later)	4.4	7-8 7-8	698 1,117	XXXXXXX XXXXXXX XXXXXXX XXXXXXX	XXXXXXXX XXXXXXXX XXXXXXXX XXXXXXXX
Subtotal	XXXXXXXXX	XXX	XXXX	1 015	xxxxxxxxxxxxxxxxx	XXX	XXXX	1,815	1,148	667
Elmer Meyers Jr/Sr High Coughlin High School New High School - Plains	1930/73 1909/52 2019	7.7 3.7 78	7-12 9-12	717 955	Close Close New (2021)	3.7 78	9-12	2,457	XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX	XXXXXXXX
Subtotal	XXXXXXXX	XXX	XXXX	1,672	xxxxxxxxxxxxxxxxx	XXX	XXXX	2,457	2,212	245
District Administtation Wilkes-Barre Twp Maintenance Former Plains Jr High School Empire Street Property (vacant land)	1900-1912 1930-1940 1922	1.1 8 2 7.3			Maintain Maintain Maintain			, -	XXXXXXX XXXXXXXX XXXXXXXX XXXXXXXX DESCRIPT BOARD REOUIRED	XXXXXXX XXXXXXXX XXXXXXXX XXXXXXXX ION OF ACTIONS BELOW
Subtotal	XXXXXXXX	XXX	XXXX		xxxxxxxxxxxxxxxxxxx	XXX	XXXX		~	
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		OTHE	K (DES	CRIBE):						

EXHIBIT C:

Enrollment Projections

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

Wilkes-Barre Area SD 118408852

	<u>YEAR</u>	<u>K</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>Total</u>
	2011 - 2012	509	521	538	530	506	526	513	608	551	542	587	536	574	7041
	2012 - 2013	541	549	513	546	520	497	506	517	530	577	551	551	536	6934
	2013 - 2014	543	545	525	523	532	514	494	535	531	535	586	507	533	6903
	2014 - 2015	558	543	536	517	520	531	512	526	524	521	550	540	517	6895
	2015 - 2016	530	566	555	536	517	508	535	524	508	536	539	523	527	6904
PROJECTIONS															
	2016 - 2017	559	562	558	558	529	510	512	556	504	516	549	503	518	6934
	2017 - 2018	522	596	554	561	551	522	514	532	534	512	528	512	498	6936
	2018 - 2019	562	557	588	557	554	544	526	534	511	542	524	493	507	6999
	2019 - 2020	566	600	550	591	550	546	548	546	513	519	555	489	488	7061
	2020 - 2021	577	605	592	553	584	543	550	569	525	521	531	518	484	7152
	2021 - 2022	589	616	597	595	546	576	547	571	547	533	533	495	513	7258
	2022 - 2023	601	629	608	600	588	539	580	568	549	555	546	497	490	7350
	2023 - 2024	612	641	621	611	592	580	543	602	546	557	568	509	492	7474
	2024 - 2025	625	654	632	624	603	584	584	564	579	554	570	530	504	7607
	2025 - 2026	638	667	645	635	616	595	588	606	542	588	567	532	525	7744

Various Grade Groupings of the Enrollment Projections

<u>YEAR</u>	<u>K-4</u>	<u>K-5</u>	<u>K-6</u>	<u>K-7</u>	<u>K-8</u>	<u>K-9</u>	<u>K-12</u>	<u>5-8</u>	<u>6-8</u>	<u>7-8</u>	<u>6-9</u>	<u>7-9</u>	<u>7-12</u>	<u>8-12</u>	<u>9-12</u>	<u>10-12</u>
2015 - 2016	2704	3212	3747	4271	4779	5315	6904	2075	1567	1032	2103	1568	3157	2633	2125	1589
2020 - 2021	2911	3454	4004	4573	5098	5619	7152	2187	1644	1094	2165	1615	3148	2579	2054	1533
2025 - 2026	3201	3796	4384	4990	5532	6120	7744	2331	1736	1148	2324	1736	3360	2754	2212	1624

Notes:

- 1. Excludes students in full-time out-of-district special education, comprehensive AVTSs, charter schools, state-owned schools, consortium-operated alternative high schools, and juvenile correctional institutions.

 Enrollment projections beyond five years are subject to errors in the lower grades resulting from inconsistencies between actual and
- projected live births and should be reviewed closely.

 Four year old kindergarten students, if any, added to K enrollments.
- Elementary and secondary ungraded students were distributed among the grades. Therefore, enrollments by grade may differ from those reported by the local education agencies.

Sources:

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

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

<u>Section III – Project Options</u>

PROJECT OPTIONS:

A series of options were developed to respond to the identified building and educational deficiencies and the District's goals. In particular, District administration and personnel emphasized the importance of providing facilities that alleviate overcrowding, particularly at the elementary and high school facilities, address enrollment growth, and satisfy contemporary educational facility standards, including, for example, room sizes, technology, privacy, safety, and systems (e.g., HVAC, electrical, mechanical, security). Board Members and District Administration narrowed the study to the following seven options:

The following options were developed.

Option 1: Renovation of Existing Schools per Code

Option 2: Two New High Schools at Two New Sites

Option 3: One Consolidated High School at a New Site

Option 4: Two New Neighborhood High Schools at Existing Sites

Option 5: Retain the Three Secondary School Model at Existing Sites

Option 6: Two Neighborhood High Schools & a K-8 School at Existing Sites

Option 7: Two Neighborhood High Schools, a K-8 School, and a Renovated K-6

Option 1 addresses the conceptual project costs necessary to renovate and modernize each District facility to current codes and standards (where feasible). Options 2-7 offer alternative solutions to address educational and facility deficiencies at James M. Coughlin Sr. High School, Elmer L. Meyers Jr./Sr. High School, and G.A.R. Jr./Sr. High School. Options for the long-term use of the Edward Mackin School are also suggested. Options 6 and 7 include a K-8 school option. Option 7 includes a renovated K-6 option.

Because Option 1 is the only option that specifically addresses all facilities, the reader should refer to Option 1 for facilities that are not specifically addressed in Options 2-7, e.g. the elementary centers and the Solomon-Plains Junior High School.

The New High School project is based on Option 3.

ADVANTAGES & DISADVANTAGES:

A summary of each option is listed on the following pages. The summary includes conceptual costs and a list of advantages and disadvantages that may be applicable to a specific option. Advantages and disadvantages are based on informal discussions conducted with District personnel, members of the administration, and members of the District Board. In general, the following factors were considered when evaluating options.

- Compatibility with current curriculum, instructional practices, and the District's educational objectives
- Opportunities for diverse educational programs
- Opportunities for enhanced student attention
- Impact on the surrounding neighborhood, community, and District as a whole
- Opportunities for strategic partnering with neighboring uses and educational providers
- Ability to accommodate enrollment growth
- Consistency with the District's historical educational alignment

- Ease and ability of meeting or exceeding contemporary education facility standards
- Ability to meet most recent code and energy efficiency standards (e.g. HVAC, electrical, mechanical)
- Quantifiable cost from an order of magnitude perspective
- Impact on educational environment
- Traditional architectural and planning practices

The value of advantages and disadvantages is subjective and based on past personal experiences. As such, each advantage and disadvantage should be viewed as a point of discussion in forming a balanced consensus of which option is best suited to deliver the District's educational program within financial constraints.

Option 1: Renovation of Existing Schools per Code

SUMMARY OF WORK & PROPOSED ALIGNMENT:

Improvements to all schools to address code, structural, accessibility, and system deficiencies in order to bring facilities (at present use) to current codes and standards, where feasible.

Advantages:

- Maintains neighborhood school concept
- Maintains community involvement based on the District's historical alignment
- Maintains historical transportation costs
- Maintains traditional pedestrian patterns

Disadvantages:

- Fails to address anticipated enrollment growth or future expansion
- Higher risk that construction costs could escalate upon the discovery of unforeseen conditions with existing facilities
- Maintains inadequately sized spaces, including inadequately sized classrooms, labs, multi-purpose rooms, libraries, cafeterias, kitchen production and serving areas, toilet rooms, and gymnasiums
- Continues the undesirable use of shared and undersized space for administrative staff
- Continues the undesirable use of shared and undersized educational spaces for music, art, health, speech and vision, emotional support, and life skills
- Fails to provide an adequate number of meeting rooms for tutoring and smaller class size instruction (speech and remedial programs, psychological testing, etc.)
- Continues the undesirable use of shared space for private guidance counseling and nurse/wellness interviews with students
- Fails to provide the District opportunities to secure operational economies by eliminating the duplication of services
- Continues the undesirable practice of having staff travel between school facilities on a daily basis

- Fails to provide shared and teaming facilities that may enhance educational programming initiatives amongst teachers and departments
- Renovation and improvement projects would be a multisemester and multi-year construction project and would significantly impact the educational environment
- The bulk of the District's facilities, excluding Plains/Solomon and Edward Mackin, remain, generally, outdated and functionally obsolete
- Provides the least amount of state reimbursement
- Expends significant funding on facilities and systems with the shortest remaining useful life

Option 2: Two New High Schools at Two New Sites

SUMMARY OF WORK & PROPOSED ALIGNMENT:

- New North Sr. High School Construction of a New High School serving 1,200-1,300 students in Grades 9-12, encompassing approximately 245,000 SF, and located to serve students from the Plains, Laflin, North End and East End sections of Wilkes-Barre, Bear Creek, and Buck Township areas. The North High School would serve students who would traditionally be enrolled at James M. Coughlin Sr. High School.
- New Central Sr. High School Construction of a New High School serving 1,200-1,300 students in Grades 9-12, encompassing approximately 245,000 SF, and located to serve students from the Heights, Central and South Wilkes-Barre area. The Central High School would serve students who would traditionally be enrolled in Grades 9-12 at G.A.R. Jr./Sr. High School and Elmer L. Meyers Jr./Sr. High School.
- New Middle or Junior High School at G.A.R. Renovation and improvements to the existing G.A.R. Jr./Sr. High School to establish a Middle School serving 825 875 students in Grades 6-8 and who would traditionally be enrolled in Grades 7-8 at G.A.R. Jr./Sr. High School and Elmer L. Meyers Jr./Sr. High School, and Grade 6 of the G.A.R. and Meyers feeder schools. Alternatively, a Junior High could be established.
- High School for Grades 9-10 or Long-Term Elementary School –
 Renovations other than those required to convert the Edward Mackin School to an elementary school are negligible.

Advantages

- Provides two equally sized schools capable of providing similar programs and opportunities to all students
- Minimizes inequities in educational offerings
- Minimizes inequities created due to differently sized facilities and educational programs
- Replaces the existing Coughlin and Meyers schools, both of which fail to provide facilities satisfying contemporary educational standards
- Provides New High Schools and a New Renovated Middle School (or Junior High) addressing modern energy efficiency,

- architectural, space, day-lighting, air quality, and contemporary educational facility standards
- Could provide additional space at the elementary school level by moving Grade 6 from the G.A.R. and Meyers feeder schools to a new Middle School
- Provides additional office space and conference areas for faculty and administrative staff at both the elementary and secondary center levels
- Addresses existing secondary center room size and technological deficiencies
- Minimizes the use of shared and undersized educational spaces and addresses facilities for music, art, health, speech and vision, emotional support, life skills and autistic programs
- Provides meeting rooms for tutoring and small group instruction
- Provides private meeting rooms for guidance counseling and nurse/wellness interviews with students
- Provides the District an opportunity to secure operational economies by eliminating the duplication of staff services
- Minimizes staff travel time between schools
- Provides increased opportunities for educational programming initiatives and teaming activities amongst teachers and departments
- Re-establishes neighborhood elementary school in the East End section of Wilkes-Barre

Disadvantages

- Converts the G.A.R. Jr./Sr. High School to a new Middle School or Junior High
- Reduces the existing neighborhood secondary school concept to a regional concept
- During construction renovation work at the New Middle School or Junior High, students would need to be temporarily relocated and/or the construction renovation work phased over two summer breaks. Students and staff may be inconvenienced and the educational programming negatively impacted. Minor construction work may also occur during the school year further impacting the educational environment
- Construction costs associated with the construction renovation work at the New Middle School or Junior High could escalate upon the discovery of unforeseen conditions
- Increases transportation costs as students who would traditionally walk to the closed secondary center would need to be bused to one of the new High Schools

Option 3: One Consolidated High School at a New Site

SUMMARY OF WORK & PROPOSED ALIGNMENT:

 One New Consolidated High School – Construction of a New High School serving 2,500 - 2,600 students in Grades 9-12 and encompassing

- approximately 410,000 SF. The Consolidated High School would serve all District students in Grades 9-12.
- New Middle School or Junior High at G.A.R. Renovation and Improvements to the existing G.A.R. Jr./Sr. High School to establish a Middle School serving 825 875 students in Grades 6-8 and who would traditionally be enrolled in Grades 7-8 at G.A.R. Jr./Sr. High School and Elmer L. Meyers Jr./Sr. High School, and Grade 6 of the G.A.R. and Meyers feeder schools. Alternatively, a Junior High could be established.
- High School for Grades 9-10 or Long-Term Elementary School Renovations other than those required to convert the Edward Mackin School to an elementary school are negligible.

Advantages

- Provides equal educational opportunities to all students regardless of where the student resides within the school district
- Minimizes inequities created between differently sized facilities and educational programs
- Replaces the existing Coughlin and Meyers schools, both of which fail to provide facilities satisfying contemporary educational standards
- Provides a new High School and a New Renovated Middle School or Junior High addressing modern energy efficiency, architectural, space, day-lighting, air quality, and contemporary educational facility standards
- Could provide additional space at the elementary school level by moving Grade 6 from the G.A.R. and Meyers feeder schools to a new Middle School
- Provides additional office space and conference areas for faculty and administrative staff at both the elementary and secondary school levels
- Addresses existing secondary center room size and technological deficiencies
- Minimizes the use of shared and undersized educational spaces and addresses facilities for music, art, health, speech and vision, emotional support, life skills and autistic programs
- Provides meeting rooms for tutoring and small group instruction
- Provides private meeting rooms for guidance counseling and nurse/wellness interviews with students
- Provides the District an opportunity to secure operational economies by eliminating the duplication of staff services
- Eliminates staff travel time between schools
- Provides increased opportunities for educational programming initiatives and teaming activities amongst teachers and departments
- Re-establishes neighborhood elementary school in the East End section of Wilkes-Barre

Disadvantages

 Converts the G.A.R. Jr/Sr. High School to a new Middle School or Junior High

- Reduces the existing neighborhood secondary school concept to a District-Wide concept
- During construction renovation work at the New Middle School or Junior High, students would need to be temporarily relocated and/or the construction renovation work phased over two summer breaks. Students and staff may be inconvenienced and the educational programming negatively impacted. Minor construction work may also occur during the school year further impacting the educational environment
- Construction costs associated with the construction renovation work at the New Middle School or Junior High could escalate upon the discovery of unforeseen conditions
- Available property for a Consolidated High School is limited and would likely be expensive to obtain and develop
- Likely to increase transportation costs as students from the bulk of the District will need to be bused to the Consolidated High School

Option 4: Two New Neighborhood High Schools at Existing Sites

SUMMARY OF WORK & PROPOSED ALIGNMENT:

- New North Sr. High School Construction of a New High School serving 1,200 1,300 students in Grades 9-12, encompassing approximately 245,000 SF, and located at the existing James M. Coughlin Sr. High School site and immediately adjacent areas. The New North High School would serve students who would traditionally be enrolled at Coughlin High School.
- New Central Sr. High School Construction of a New High School serving 1,200 -1,300 students in Grades 9-12, encompassing approximately 245,000 SF, and located at the existing Elmer L. Meyers Jr./Sr. High School site and immediately adjacent areas. The New Central High School would serve students who would traditionally be enrolled in Grades 9-12 at G.A.R. Jr./Sr. High School and Elmer L. Meyers Jr./Sr. High School.
- New Middle School or Junior High at G.A.R. Renovation and improvements to the existing G.A.R. Jr./Sr. High School to establish a Middle School serving 825 875 students in Grades 6-8 and who would traditionally be enrolled in Grades 7-8 of G.A.R. Jr./Sr. High School and Elmer L. Meyers Jr./Sr. High School, and Grade 6 of the G.A.R. and Meyers feeder schools. Alternatively, a Junior High could be established.
- High School for Grades 9-10 or Long-Term Elementary School Renovations other than those required to convert the Edward Mackin School to an elementary school are negligible.

Advantages

- Reinforces historical use patterns
- Maintains neighborhood school presence in downtown Wilkes-Barre, the Heights section of Wilkes-Barre, and South Wilkes-Barre
- Maintains historical transportation and pedestrian patterns
- Provides two equally sized schools capable of providing similar programs and opportunities to all students

- Minimizes inequities in educational offerings
- Minimizes inequities created due to differently sized facilities and educational programs
- Replaces the existing Coughlin and Meyers schools, both of which fail to provide facilities satisfying contemporary educational standards
- Provides New High Schools and a New Renovated Middle School or Junior High addressing modern energy efficiency, architectural, space, day-lighting, air quality, and contemporary educational facility standards
- Could provide additional space at the elementary school level by moving Grade 6 from the G.A.R. and Meyers feeder schools to a new Middle School
- Provides additional office space and conference areas for faculty and administrative staff at both the elementary and secondary center levels
- Addresses existing secondary center school room size and technological deficiencies
- Minimizes the use of shared and undersized educational spaces and addresses facilities for music, art, health, speech and vision, emotional support, life skills and autistic programs
- Provides meeting rooms for tutoring and small group instruction
- Provides private meeting rooms for guidance counseling and nurse/wellness interviews with students
- Provides the District an opportunity to secure operational economies by eliminating the duplication of staff services
- Minimizes staff travel time between schools
- Provides increased opportunities for educational programming initiatives and teaming activities amongst teachers and departments
- Re-establishes neighborhood elementary school in the East End section of Wilkes-Barre

Disadvantages

- Converts the G.A.R. Jr/Sr. High School to a New Middle School or Junior High
- During construction renovation work at the New Middle School or Junior High, students would need to be temporarily relocated and/or the construction renovation work phased over two summer breaks. Students and staff may be inconvenienced and the educational programming negatively impacted. Minor construction work may also occur during the school year further impacting the educational environment
- Construction costs associated with the construction renovation work at the New Middle School or Junior High could escalate upon the discovery of unforeseen conditions
- Increases transportation costs as Grade 9-12 students who would traditionally walk to G.A.R. may need to be bused to the New High School at the Meyers site and Grade 7-8 students who

would traditionally walk to Meyers may need to be bused to the New Middle School or Junior High at the G.A.R. site

Option 5: Retain the Three Secondary School Model at the Existing Sites

SUMMARY OF WORK & PROPOSED ALIGNMENT:

- New North Sr. High School Construction of a New High School serving 1,200 1,300 students in Grades 9-12, encompassing approximately 245,000 SF, and located at the existing James M. Coughlin Sr. High School site and immediately adjacent areas. The New North High School would serve students who would traditionally be enrolled at Coughlin High School.
- New South Jr./Sr. High School Construction of a New High School serving 1,000-1,100 students in Grades 7-12, encompassing approximately 225,000 SF, and located at the existing Elmer L. Meyers Jr./Sr. High School site and immediately adjacent areas. The New South High School would serve students who would traditionally be enrolled in Grades 7-12 at Meyers Jr./Sr. High School.
- New Central Jr./Sr. High School Renovation and improvements to the existing G.A.R. Jr./Sr. High School serving 800 – 850 students in Grades 7-12. The New Central High School would serve students who would traditionally be enrolled in Grades 7-12 at G.A.R. Jr./Sr. High School.
- High School for Grades 9-10 or 9-12, Career Exploratory (vocational) School for Grades 9-12, an Elementary School, or a Middle School - Renovations other than those required to convert the Edward Mackin School to an elementary school are negliable.

Advantages

- Maintains neighborhood school presence in downtown Wilkes-Barre, the Heights section of Wilkes-Barre, and South Wilkes-Barre
- Maintains community involvement based on the District's historical alignment
- Maintains historical transportation costs
- Maintains traditional pedestrian patterns
- Replaces the existing Coughlin and Meyers schools, both of which fail to provide facilities satisfying contemporary educational standards
- Provides Renovated or New Secondary Centers addressing modern energy efficiency, architectural, space, day-lighting, air quality, and contemporary educational facility standards
- Provides additional office space and conference areas for faculty and administrative staff
- Addresses existing secondary center room size and technological deficiencies
- Minimizes the use of shared and undersized educational spaces and addresses facilities for music, art, health, speech and vision, emotional support, life skills and autistic programs
- Provides meeting rooms for tutoring and small group instruction
- Provides private meeting rooms for guidance counseling and nurse/wellness interviews with students

 Re-establishes neighborhood elementary school in the East End section of Wilkes-Barre

Disadvantages

- During construction renovation work at each secondary center, a substantial portion of the student body would need to be temporarily relocated. The construction renovation work would also be phased over multiple summer breaks and may also occur during the school year. Students and staff may be inconvenienced and the educational programming will likely be negatively impacted
- Construction costs associated with the construction renovation work at the secondary centers could escalate upon the discovery of unforeseen conditions
- Equal educational opportunities may be difficult to develop at the South and Central schools without significant facility and administrative/faculty costs
- Likely to have higher operating and staffing costs when compared to the consolidated or two high school options because of the duplication of facilities and staff services

Option 6: Two Neighborhood High Schools & a New K-8 School at Existing Sites

SUMMARY OF WORK & PROPOSED ALIGNMENT:

- New High School Construction of a New High School located at an existing District owned site (e.g. Solomon/Plains site, Empire Street Site, James M. Coughlin Sr. High School site or Elmer L. Meyers Jr./Sr. High School site) and serving students who would traditionally attend Coughlin and Meyers. The school may be sized for a District-wide open enrollment scenario (e.g. whereby the school could absorb students who would traditionally attend G.A.R. Jr./Sr. High School) and for enrollment growth. Construction may include renovation of the Coughlin Annex. Acquisition or leasing of other buildings and properties is anticipated.
- New K-8 School at Kistler Renovations and addition(s) to the existing Kistler Elementary School to convert the school into a new Elementary and Middle school serving grades K-8.
- G.A.R Jr./Sr. High School Renovations, improvements, and additions (if needed) to the existing G.A.R. Jr./Sr. High School such that the school remains a Jr./ Sr. High School or is converted to a new K-8 Elementary & Middle School for students who would traditionally attend G.A.R and Boyd Dodson Elementary school.
- High School for Grades 9-10 or 9-12, Career Exploratory (vocational) School for Grades 9-12, an Elementary School, or a Middle School - Renovations other than those required to convert the Edward Mackin School to a long term elementary school are negligible.

Advantages

- Maintains neighborhood school presence in downtown Wilkes-Barre, Plains Twp., the Heights section of Wilkes-Barre, and South Wilkes-Barre
- Maintains community involvement based on the District's historical alignment
- Replaces the existing Coughlin and Meyers schools, both of which fail to provide facilities satisfying contemporary educational standards
- Provides renovated or new schools addressing modern energy efficiency, architectural, space, day-lighting, air quality, and contemporary educational facility standards
- Provides additional office space and conference areas for faculty and administrative staff
- Addresses existing secondary center room size and technological deficiencies
- Minimizes the use of shared and undersized educational spaces and addresses facilities for music, art, health, speech and vision, emotional support, life skills and autistic programs
- Provides private meeting rooms for guidance counseling and nurse/wellness interviews with students

Disadvantages

- The construction renovation work may need to be phased over multiple summer breaks and may also occur during the school year. Students and staff may be inconvenienced and the educational programming will likely be temporarily impacted
- Construction costs associated with the schools and additions to be constructed could escalate upon the discovery of unforeseen conditions such as subsurface deficiencies

Option 7: Two Neighborhood High Schools, a Neighborhood K-8 School, and a Renovated K-6

SUMMARY OF WORK & PROPOSED ALIGNMENT:

- New 9-12 High School Construction of a New High School serving grades 9-12 and located at the Solomon/Plains Parcel, the Biscontini Parcel, the Pagnotti Parcel, the Meyers Parcel, or the Coughlin Parcel and serving students who would traditionally attend Coughlin and Meyers. The school may be sized for a District-wide open enrollment scenario (e.g. whereby the school could absorb students who would traditionally attend G.A.R. Jr./Sr. High School) and for enrollment growth. The project may include the acquisition of other properties and buildings or the leasing of other properties and buildings (e.g. including but not limited to the Times Leader building or parcel or the Biscontini parcel, or portions thereof) and the demolition, renovation, or improvement thereof.
- New Elementary and Middle School at Kistler Renovations and addition(s) to the existing Kistler Elementary School to convert the school into a new Elementary and Middle school serving grades K-8.

- Renovated Elementary at Heights Murray Renovations and addition(s), if needed, to the existing Heights Murray Elementary School.
- G.A.R. Jr./Sr. High School Renovations, improvements, and additions (if needed) to the existing G.A.R. Jr./Sr. High School such that the school remains a Jr./ Sr. High School serving grades 7-12.
- New High School for Grades 9-10 or 9-12, Career Exploratory (vocational)
 School for Grades 9-12, an Elementary School, or a Middle School Renovations other than those required to convert the Edward Mackin School to an elementary school are negligible.

Advantages

- Maintains neighborhood school presence in downtown Wilkes-Barre or Plains Twp., the Heights section of Wilkes-Barre, and South Wilkes-Barre
- Maintains community involvement based on the District's historical alignment
- Replaces the existing Coughlin and Meyers schools, both of which fail to provide facilities satisfying contemporary educational standards
- Provides renovated or new schools addressing modern energy efficiency, architectural, space, day-lighting, air quality, and contemporary educational facility standards
- Provides additional office space and conference areas for faculty and administrative staff
- Addresses existing secondary center room size and technological deficiencies
- Minimizes the use of shared and undersized educational spaces and addresses facilities for music, art, health, speech and vision, emotional support, life skills and autistic programs
- Provides private meeting rooms for guidance counseling and nurse/wellness interviews with students

Disadvantages

- The construction renovation work may need to be phased over multiple summer breaks and may also occur during the school year. Students and staff may be inconvenienced and the educational programming will likely be temporarily impacted
- Construction costs associated with the schools to be renovated could escalate upon the discovery of unforeseen conditions such as façade or structural issues, mechanical issues, electrical issues, etc.
- Construction costs associated with the schools and additions to be constructed could escalate upon the discovery of unforeseen conditions such as subsurface or soil deficiencies

<u>Section IV –</u> <u>Architectural Review and Project Features</u>

ARCHITECTURAL REVIEW AND SPECIAL FEATURES:

The Wilkes-Barre Area School District following a thorough and detailed Feasibility Study process (2014-2016) decided to embark on a building program for a new secondary center. The new consolidated high school will be located on an 80-acre +/- site in Plains Township approximately in the geographical center of the school district (property acquisition is required). The New High School will house the 9th -12th grade students presently attending Meyers Sr. High School, GAR Sr. High School & Coughlin Sr. High School.

General Information:

Formal name: Name to be determined (WBASD Consolidated High

School)

Address: Bounded by North Main Street to the East; Maffet

Street, and SR 309 (N Cross Valley Expressway)

Plains Township, PA 18705

• Site size: 78.22+/- acres

Grade structure: 9th-12th (high)

• District Personnel: 200 +/- FTE (faculty, staff, administration, etc.)

• Number of Students: The basis of design for the student population at the

New High School is the actual enrollment of 10/30/14:

950 (current 9-12 from Coughlin High School)
550 (current 9-12 from G.A.R. High School)
600 (current 9-12 from Meyers High School)
2,100 current subtotal
420 20% growth

2,520 Total

Busing information: The basis of design for accommodating buses serving

the New High School 9-12 is:

35-45 school buses 15-25 IU vans

• Parking, busing, and drop off areas have separate circulation patterns in order to keep vehicular / pedestrian conflicts to a minimum.

Building Design Information:

New Program Area: 401,500 SF – Total Area (with Natatorium)

NOTE: (392,000 SF excluding Natatorium)

• Number of Stories: One to two stories (no basement)

Educational Program Information:

A committee of administrators developed the educational program and the philosophy for the school. Key elements include the following features and benefits.

Classroom occupancy (9th-12th grades) shall be equal to or less than the current classroom occupancy, based on 24 students per classroom.

The 9th-12th grade space program includes:

- Main Office Administrative Suite
- Nurse's Suite
- Guidance Counselor's Suite
- Information Technology Office and Server Room
- School Resource Officer's (4 located throughout building)
- Main Street (Central School Corridor)
 - Student Store
 - Career Development Resource Room
 - Heritage Room
 - Faculty Planning Room / Multi-Purpose
 - Elevator to 2nd floor of Gym and Classroom Wings
- Auditorium (fixed seating for 1,100+/-)
 - 2 Dressing Rooms with Restrooms
 - Set and Prop Storage Area
 - Control Booth
- Music Department:
 - Chorus Room
 - Small Group Practice Room
 - Individual Practice Room
 - Band Room
 - Small Group Practice Room
 - Individual Practice Room
- Athletic Department:
 - The Main Gymnasiums, with fixed main floor seating for 1,800+/-
 - (Note: no seating at auxiliary gym.)
 - Raised Track (approximately 660 bleachers at this upper level)
 - Athletic Storage Rooms
 - Main & Visitors Boys and Girls Locker Rooms
 - Faculty / Officials Locker Rooms
 - Single Person Changing / Locker Room
 - Concession Stand
 - Ticket Booth
 - The Auxiliary Gymnasium (no seating but movable bleachers from Main Gym)
 - Physical Education Teacher's Offices (5 only 4 if Natatorium is included)

- Coaches' Offices (8)
- Trainer's Room (1)
- Team Meeting Room (1)
- Wresting Room (2 permanent practice mats)
- Wellness & Fitness Center
- Athletic Equipment & Bag Storage Rooms
- Science, Technology, Engineering, and Mathematics Center
 - Fabrication Lab (1) with storage
 - Open Digital Studio (1)
 - Learning Studios (3)
 - Small Group Project Room (4)
 - 3-D Printer / Digital Fabrication Room (1)
 - Open Common Area
- General Educational Spaces
 - Classrooms for general instruction (83)
 - Science Laboratories Physics, Biology, Chemistry (16)
 - Computer Labs (4)
 - Research and Tech Rooms (2)
 - Art Labs (3)
 - Large Group Instruction Room (1)
- Special Educational Spaces
 - Life Skills Classrooms (4)
 - Learning Support Classrooms (3)
 - Itinerant Support (1)
 - Emotional Support (2)
 - English Language Learners (2)
 - Vision Impairment Support (1)
 - Autism Support (1)
 - Related Services (1)
 - Proactive Counseling (1)
 - Speech Therapy Room (1)
- Learning Commons & Media Center
 - Circulation Desk
 - Librarian's Office
 - Shelving for 7,000 books +/-
 - Computer Worktables
 - Soft Seating Areas
 - Conference Rooms (2)
- Natatorium
 - 6 lanes (min.) with a lift
 - Mezzanine Spectator Seating (200 capacity +/-)
 - Team Seatina
 - Shared Physical office
 - 1st Floor Spectator Area (10-15 person capacity)

Design Features:

The New Wilkes-Barre Area School District High School is a combined facility for the District's existing 3 secondary centers.

It is to be located on a large open site in Plains Township immediately north of the Wilkes-Barre City line. It comprises an area of 80 acres+/-, and the new building will primarily be a 1-to-2 story masonry bearing-wall structure with some steel-framed structure; the exterior materials are a combination of brick, decorative concrete block, cast stone, limited areas of an exterior insulation and finish system such as 'Dryvit,' and some limited areas of flat metal panel. The exterior building envelope includes energy efficient windows. The educational spaces (classrooms, labs, etc.) will include modern technology consistent with the educational delivery in the District's fairly recently-completed Mackin school project. The New High School will include new HVAC, plumbing, electrical, technology and fire protection systems. The building will also feature corridor lockers for all 9th through 12th graders.

Special features of the school include a main gymnasium with seating in the round and an elevated track; ability to combine main and auxiliary gym for special event seating capacity of 3,000 (max.); a state-of-the-art high school auditorium with 1,100 seating capacity and continental seating area of 350 for smaller events; Main Street central circulation spine; cafeteria with views to outdoor seating area; STEM center; wellness and fitness center; wrestling room; natatorium.

Section V – Direct Costs

DIRECT COSTS:

The estimated Direct Costs for the project are included on the following pages. These pages have been prepared from PDE's Planning Construction Workbook for reimbursable projects, Part D. The estimates and various breakdowns are shown on PlanCon D02, D03, D-ADD'T COSTS, and D04.

The Act 34 Maximum Building Construction Cost for the new building and the Maximum Project Cost adopted by the Wilkes-Barre Area School District's Board of Directors are shown on PlanCon D20 and D03 respectively.

PROJECT ACCOUNTING BASED ON ESTI	MATES (1 of	2)	
D istrict/CTC: ProjectName:		Project	
Wilkes-Barre Area School District New High School - Pla ROUND FIGURES TO NEAREST	•		3885
PROJECT COSTS	NEW	EXISTING	TOTAL
A. STRUCTURE COSTS (include size developm ent)	NEW	EXISTING	TOTAL
1. General (Report costs for sanitary sewage disposalon line E-1.)	59,679,476		59,679,476
2. Heating and Ventilating	14,378,794		14,378,794
3. Plumbing (Report costs for sanitary sewage disposalon line E-1.)	5,973,121		5,973,121
4. Electrical	14,157,578		14,157,578
5. Asbestos Abatement (D04, line C-3)	x x x x x x		
6. Building Purchase Amount	x x x x x x		
7. Other * (Exclude testborings and site survey)			
a . Fire Protection	1,763,551		1,763,551
b. Site Work	9,657,653		9,657,653
c.			
d. Bonds	948,453		948,453
e. PlanCon-D-Add't Costs, Total	2,772,215		2,772,215
A-1 to A-7 - Subtotal	109.330.841		109,330,841
8. Construction Insurance	100,000,041		100,000,041
a. Owner Controlled Insurance Program on			
Structure Costs (Exclude asbestos abatem ent, building			
purchase and other structure costs not covered by the program) b. Builder's Risk Insurance (if not included in prim	139,628		139,628
c. Construction Insurance - Total	139,628		139,628
9. TOTAL-Structure Costs (A-1 to A-7-Subtotal plus A-8-c	109,470,469		109,470,469
3. ARCHITECT'S FEE			
1. Architect's/Engineer's Fee on Structure	5,130,639		5,130,639
2. EPA-Certified Project Designer's	XXXXXX		2,122,222
Fee on Asbestos Abatement	x x x x x x		
3. TOTAL - Architect's Fee	5,130,639		5,130,639
C. MOVABLE FIXTURES AND EQUIPMENT			
1. Movable Fixtures and Equipment	2,266,959		2,266,959
2. Architect's Fee	97,474		97,474
3. TOTAL - Movable Fixtures & Equipment	2,364,433		2,364,433
O. STRUCTURE COSTS, ARCHITECT'S FEE,			, ,
MOVABLE FIXTURES & EQUIPMENT -	116,965,541		116,965,541
TOTAL (A-9 plus B-3 and C-3)			
E. SITE COSTS	454.000		454.000
1. Sanitary Sewage Disposal 2. Sanitary Sewage Disposal Tap-In Fee and/or	451,930		451,930
Capacity Charges	125,000		125,000
3. Owner Controlled Insurance Program/Builder's Risk			
Insurance on Sanitary Sewage Disposal 4. Architect's/Engineer's Fee for			
Sanitary Sewage Disposal	19,433		19,433
5. Site Acquisition Costs		$x \times x \times x \times x$	
a. Gross Amount Due from Settlement Statement		X X X X X X X	
or Estimated Just Compensation		X X X X X X X	
b. Real Estate Appraisal Fees		XXXXXX	
c.Other Related Site Acquisition Costs d.Site Acquisition Costs - Total		X X X X X X	
	506 363	XXXXXX	506 262
6. TOTAL - Site Costs F. STRUCTURE COSTS, ARCHITECT'S FEE,	596,363		596,363
MOVABLE FIXTURES & EQUIPMENT, AND	117,561,904		117,561,904
SITE COSTS - TOTAL (D plus E-6)	, , , , , , , , , , , , , , , , , , , ,		, - ,
* Type "No Fee" beside each item for which r	no desian fee	is charged.	

REVISED JULY 1, 2010 FORM EXPIRES 6-30-12 PLANCON-D02

PROJECT	ACCOUNTING BASE	ON ESTIMATES (2 of 2)				
District TC: Wilkes-Barre Area School District	New High School - P	ains Township		Project#:	3885		
.	ROUND FIGURES TO	NEAREST DOLLAR		1			
PROJECT COSTS (CONT.)					TOTAL		
G. ADDITIONAL CONSTRUCTION-REL	ATED COSTS						
1. Project Supervision (in	c. Asbestos Abat	ement Project Su	pervision)			
2. Construction Manager Fee and Related Costs							
3. Total Demolition of Ent	-						
to Prepare Project Site AHERA Clearance Air Mon			_		ted I		
on Asbestos Abatement (-	-	_	1 3 166			
4. Architectural Printing					56,406		
5. Test Borings							
6. Site Survey					4,000		
7. Other (attach schedule	if needed)						
a. Geotech Investigation	n - Core Borings	and Report			77,570		
b.PlanCon-D-Add't Costs	s, Total				513,510		
8. Contingency					4,316,607		
9. TOTAL - Additional Cons	truction-Related	Costs			7,813,668		
H. FINANCING COSTS	BOND ISSUE/NOTE	BOND ISSUE/NOTE	BOND ISS	UE/NOTE	XXXXXX		
FOR THIS PROJECT ONLY	SERIES OF 2016	SERIES OF 2019	SERIES OF		x x x x x x		
1. Underwriter Fees	98,476	606,400			704,876		
2. Legal Fees	35,079	185,000			220,079		
3. Financial Advisor	49,238	85,000			134,238		
4. Bond Insurance	80,684	820,383			901,067		
5. Paying Agent/Trustee							
Fees and Expenses	790	3,500			4,290		
6. Capitalized Interest	4.75.4	9,873,368			9,873,368		
7. Printing	1,754 17,094	5,000			6,754 95.094		
8. CUSIP & Rating Fees 9. Other	17,094	78,000			95,094		
a. Misc		3,541			3,541		
		3,341			3,341		
b							
10. TOTAL-Financing Costs	283,115	11,660,192			11,943,307		
I. TOTAL PROJECT COSTS (F plus	G-9 plus H-10)	1			137,318,879		
	BOND ISSUE/NOTE	BOND ISSUE/NOTE	BOND ISS	UE/NOTE			
REVENUE SOURCES	SERIES OF 2016	SERIES OF 2019	SERIES OF		TOTAL		
J. AMOUNT FINANCED				_			
FOR THIS PROJECT ONLY	12,309,455	121,280,000			133,589,455		
K.ORIGINAL ISSUE DISCOUNT/ PREMIUM FOR THIS PROJECT ONLY	1,074,298				1,074,298		
L. INTEREST EARNINGS					, , ,		
FOR THIS PROJECT ONLY	4,666	198,530			203,196		
M. BUILDING INSURANCE RECEIVED							
N. PROCEEDS FROM SALE OF BUILD	ING OR LAND						
O.LOCAL FUNDS - CASH (SEE INS	TRUCTIONS)						
P. OTHER FUNDS (ATTACH SCHEDUL	E)				2,451,930		
Q. TOTAL REVENUE SOURCES					137,318,879		

		NAL PROJECT COS	rs	
Dist	mitto:	ProjectName:	ing Township	Project#:
	Wilkes-Barre Area School District			3885
D0:	2-A. STRUCTURE COSTS (incl. site dev.)	NEW	EXISTING	TOTAL
	Site - Entrance Drives	529,333		529,333
	Site - PADOT work	1,967,146		1,967,146
	Site - Prep for building pad	275,736		275,736
ТО	TAL - STRUCTURE COSTS	2,772,215		2,772,215
	* - Type "No Fee" beside each ite	m <u>listed above</u> for	which no design f	ee is charged.
D0	3 - G. ADDITIONAL CONSTRUCTION-REL	ATED COSTS		TOTAL
	Third Party Inspections			502,430
	Land Development Fee			10,380
	Zoning Fee			200
	PADOT Fee			500
шО	mai addimional concentrator per a	med cooms		512 510
ΤO	TAL - ADDITIONAL CONSTRUCTION-RELA	TED COSTS		513,510

REVISED JULY 1, 2010 FORM EXPIRES 6-30-12 PLANCON-D-ADD'T COSTS

ProjectName:			
			Project#:
New High School - Plains To	ownship		3885
	NEW	EXISTING	TOTAL
Receive Building)			
_	9,657,653		9,657,653
Prep	2,772,215		2,772,215
	12,429,868		12,429,868
rogram			
not included in primes	12,678		12,678
total	12,678		12,678
	12,442,546		12,442,546
NT	870,761		870,761
			EXISTING
, line A-5)			
FEE ON ASBESTOS			
ram on Roof Replacem	nent/Repair		
t included in primes	;)		
NT/REPAIR			
		Receive Building) 9,657,653 Prep 2,772,215 12,429,868 Program not included in primes 12,678 12,678 12,442,546 NT 870,761 ram on Roof Replacement/Repair t included in primes)	### Receive Building 9,657,653 2,772,215 12,429,868 12,678 12,678 12,442,546 NT

FOR NEW BUILDING OR SUBSTANTIAL ADDITION ONLY DistrictCTC: Wilkes-Barre Area School District New High School - Plains Township Act 34 applies only to costs for new construction. The legal required not address the costs for alterations to existing structures. For reason, costs associated with the existing structure and other relationship should not be included in the following calculations.	3885
do not address the costs for alterations to existing structures. For reason, costs associated with the existing structure and other relat	or this
A. STRUCTURE COST, ARCHITECT'S FEE, MOVABLE FIXTURES AND EQUIPMENT (D02, line D-NEW) \$\frac{116,96}{4}\$	35,541
B. EXCLUDABLE COSTS FOR NEW CONSTRUCTION THE FIGURE A:	
1. Site Development Costs (D04, line A-7-NEW \$ 12,442,546 BY THE 12. Architect's Fees on the above	
excludable costs \$ 870,761	
3. Vocational Projects Only - Movable Fixtures & Equipment (D02, line C-3-NEW) \$	
4. Total Excludable Costs (B-1 plus B-2 and B-3) \$ 13,313	3,307
C. ACT 34 MAXIMUM BUILDING CONSTRUCTION COST (A minus B-4) THE BOARD MUST ADOPT THE FIGURE ON LINE C BEFORE SCHEDULING THE FIRST	52,234
ACT 34 HEARING.	
IF THE MAXIMUM BUILDING CONSTRUCTION COST BASED ON BIDS IS EQUAL TO OR GREATER THAN THE MAXIMUM BUILDING CONSTRUCTION COST BASED ON ESTIMATES PLUS EIGHT PERCENT (LINE D), A SECOND PUBLIC HEARING WILL BE REQUIRED BEFORE ENTERING INTO CONTRACTS AND STARTING CONSTRUCTION ON ANY PLANNED WORK.	1
D. ACT 34 MAXIMUM BUILDING CONSTRUCTION COST TIMES 1.08 (C times 1.08) THE FIGURE ON LINE D SHOULD NOT BE ADOPTED BY THE BOARD.	14,412

<u>Section VI -</u> <u>Analysis of Financing Options and Budget</u> <u>Impact</u>

SUMMARY OF FINANCING OPTIONS:

The following is an analysis of the five potential methods used to finance the proposed plan of the Wilkes-Barre Area School District (the "School District") to construct a new high school (the "Project"). Included in this analysis are estimates of project costs, financing costs, debt service summaries for the alternatives and estimated local effort and millage impact as required by the Pennsylvania Department of Education.

Financing Options:

The five financing alternatives reviewed:

- 1. Cash/Short-Term Loan
- 2. State Public School Building Authority (the "SPSBA") Issue
- 3. Local Authority Issue ("Local Authority")
- 4. United States Department of Agriculture Rural Development Financing (the "USDA")
- 5. General Obligation Bond Issue

Option 1 Cash/Short-Term Loan:

After reviewing the costs and scope of the Project, the School District's recent financial statements, as well as conversations with the School District's Administration, it was concluded that Option 1 is not a viable alternative. Due to the scope of the Project, the School District does not have the available funds to pay cash for its share of the Project estimated to be 90.44% nor finance with a short-term or revolving loan due to the need of amortizing such a loan over a longer term and useful life of the assets being matched by the financing.

Option 2 SPSBA Issue and Option 3 Local Authority Issue:

The remaining four financing alternatives would require the School District to incur long-term debt. For each alternative, a borrowing was based upon various assumptions and compared with all aspects of the issues including the annual debt service requirements, estimated Commonwealth of Pennsylvania reimbursement, required covenants and financing costs. Financing costs for Option 3 SPSBA Issue and Option 4 a Local Authority Issue were higher than either USDA or General Obligation alternatives, which resulted in larger bond issues. Bonds issued through either the SPSBA or a Local Authority would be classified as revenue bonds instead of general obligation bonds. Even though the issue is solely supported by tax revenues of the School District, the investor community would view these options as once removed from a direct payment general obligation bond. Therefore, interest rates on revenue bonds tend to be slightly higher than interest rates on direct general obligation bonds and will carry slightly higher interest rates. This slight increase in interest rates together with a larger bond issue would directly result in higher annual debt service payments.

Option 4 USDA Financing:

The Project is located within an eligible geographic area to initially qualify for Federal Assistance under CF 10.766 Community Facilities Direct Loan Program. The School District has submitted a pre-application and has received notice of USDA's interest in providing assistance subject to certain terms and conditions precedent. Option 4 potentially provides savings on issuance costs and a lower interest rate when compared to Options 2, 3 and 5 although these potential benefits may be mitigated by various requirements and covenants and availability of funds is not certain.

Option 5 General Obligation Bond Issue:

This option provides lower interest rates compared to Options 2 and 3 and a similar weighted average interest rate when compared to Option 4, less costs of issuance and potentially more favorable refunding provisions (call feature) compared to Options 2 and 3. Based upon analysis of financing alternatives at this time the most beneficial alternative for financing the Project is for the School District to pursue Option 5. The School District will also continue to pursue Option 4 and maintain flexibility to use this option if warranted..

	COMPARISON OF LONG-TERM FINANCING OPTIONS 1					
	Option 2	Option 3	Option 5			
			General			
	<u>SPSBA</u>	<u>Local Authority</u>	<u>Obligation</u>			
Estimated Sources of Funds:						
Gross Bonds Sold	\$ 121,380,000	\$ 121,380,000	\$ 121,280,000			
Interest Earnings	\$ 198,653	\$ 198,708	\$ 198,530			
Equity ²	\$ 15,840,349	\$ 15,840,349	\$ 15,840,349			
Total	\$ 137,419,002	\$ 137,419,057	\$ 137,318,879			
Estimated Uses of Funds:						
Project Costs ³	\$ 125,375,572	\$ 125,375,572	\$ 125,375,572			
Underwriting Discount⁴	\$ 606,900	\$ 606,900	\$ 606,400			
Bond Insurance ⁵	\$ 823,402	\$ 823,493	\$ 820,383			
Financing Costs ⁶	\$ 664,615	\$ 664,615	\$ 639,615			
Capitalized Interest	\$ 9,943,784	\$ 9,946,112	\$ 9,873,368			
Miscellaneous	\$ 4,729	\$ 2,365	\$ 3,541			
Total	\$ 137,419,002	\$ 137,419,057	\$ 137,318,879			
All-in Cost:	4.44621564%	4.44718342%	4.41478943%			

^{1.} Amortization over a 40-year period on a wrap-around pay-back structure. Amortization attempts to mirror the useful-life of the Project.

² Includes a portion of the School Districts 2016 Bonds and \$2,451,930 of expected grant funding.

^{3.} Includes estimated Project costs as required by the Pennsylvania Department of Education.

 $^{^{\}rm 4.}\,$ Estimated at .50% of gross bonds sold.

^{5.} Estimated at .292% of gross debt service. The School District will analyze the efficiency of not purchasing bond insurance and pursuing a financing based upon a non-enhance stand-alone credit rating. The decision to purchase credit enhancement will be made at the time of actual pricing.

^{6.} Estimated.

REIMBURSEMENT

Commonwealth Reimbursement for Direct Costs

If the Project meets the eligibility requirements, the Commonwealth will reimburse the School District for a portion of the principal and interest paid each fiscal year on the bonds. The amount of reimbursement is a factor of the percentage of the Project determined by the Pennsylvania Department of Education to be reimbursable and the School District's Market Value Aid Ratio ("MVAR"). Presently, it is estimated that the Project will be eligible for reimbursement and will be assigned reimbursable dollars. The Project's estimated reimbursable percentage is calculated as follows:

Reimbursable Percentage	Current MVAR	Effective Reimbursement
14.98%	64.07%	9.56%

Therefore, the School District will be responsible for 90.44% of the annual debt service on the Project.

Estimated Debt Service Option 5 General Obligation Bond Issue

The following is a summary of estimated debt service, reimbursement, local effort, and millage equivalent of direct costs of the Project.

Estimated Average Annual Gross Debt Service	\$	7,013,967
Estimated Average Annual Reimbursement	\$	670,535
Estimated Average Annual Net Local Effort	\$	6,343,432
Estimated Millage Required of Average Annual Net Local Effort*		2.32
Calina suba al Tabad I a a ad Effa ub	Φ.	050 707 007
Estimated Total Local Effort)	253,737,286

^{*} Assumes one mill generates \$2,735,000.

Indirect Costs and Benefits

By consolidating the School District's three high schools the District anticipates significant savings on costs associated with educational programming while establishing / maintaining the most effective class size. Further, the Consolidation Plan does not include new and/or expanded educational programs that may impact indirect project costs.

Operation and maintenance of the facilities and staffing costs are also expected to be reduced. Additional staff hiring is not planned in any department within the new facility.

Transportation costs are projected to increase due to the greater number of students requiring busing. These increased costs will be moderately offset by the State transportation reimbursement.

Due to the consolidation, the overall net savings is expected to lessen the burden of the increase in debt budget.

EXHIBIT D:

Wilkes-Barre Area SD		
Series of 2019 Option 5 General Obligation		
Overall Wraparound Debt Service Schedule		
		Jan. 19 Jan. 1

Overall vvrapa	TOUTIN DEDI SE	TVICE SUITE	Mult				
Payment <u>Date</u>	Par <u>Amount</u>	Coupon	Interest	Debt Service	Annual Debt Service	Estimated Reimbursement <u>9.56%</u>	Estimated Local Share
09/01/2019	i w	2.050	2,579,761	2,579,761	E 450 500	102.050	4 000 070
03/01/2020	0	2.250	2,579,761	2,579,761	5,159,522	493,250	4,666,272
09/01/2020 03/01/2021	0	2.500	2,579,761 2,579,761	2,579,761 2,579,761	5,159,522	493,250	4,666,272
09/01/2021		2.000	2,579,761	2,579,761	0,100,022	430,200	4,000,272
03/01/2022	5,000	2.630	2,579,761	2,584,761	5,164,522	493,728	4,670,794
09/01/2022			2,579,695	2,579,695			
03/01/2023	1,755,000	2.770	2,579,695	4,334,695	6,914,391	661,016	6,253,375
09/01/2023	242.000	0.000	2,555,389	2,555,389	£ 200 777	500.000	4 040 444
03/01/2024 09/01/2024	210,000	2.920	2,555,389 2,552,323	2,765,389 2,552,323	5,320,777	508,666	4,812,111
03/01/2024	200,000	3.060	2,552,323	2,752,323	5,304,645	507,124	4,797,521
09/01/2025	200,000	0.000	2,549,263	2,549,263	0,001,010	00.,.21	1,101,021
03/01/2026	185,000	3.210	2,549,263	2,734,263	5,283,525	505,105	4,778,420
09/01/2026			2,546,293	2,546,293			
03/01/2027	170,000	3.340	2,546,293	2,716,293	5,262,587	503,103	4,759,483
09/01/2027	100 000	2.400	2,543,454	2,543,454	5 040 000	504.504	4 745 004
03/01/2028 09/01/2028	160,000	3.480	2,543,454 2,540,670	2,703,454 2,540,670	5,246,909	501,604	4,745,304
03/01/2029	5,000	3.580	2,540,670	2,545,670	5,086,341	486,254	4,600,086
09/01/2029	0,000	0.000	2,540,581	2,540,581	0,000,011	100,201	1,000,000
03/01/2030	5,000	3.650	2,540,581	2,545,581	5,086,162	486,237	4,599,924
09/01/2030			2,540,490	2,540,490			
03/01/2031	5,000	3.710	2,540,490	2,545,490	5,085,979	486,220	4,599,759
09/01/2031		2756	2,540,397	2,540,397	E 005 701	100.000	4 500 500
03/01/2032 09/01/2032	5,000	3.750	2,540,397 2,540,303	2,545,397 2,540,303	5,085,794	486,202	4,599,592
03/01/2032	5,000	3.800	2,540,303	2,545,303	5,085,606	486,184	4,599,422
09/01/2033	5,500	000	2,540,208	2,540,208	-,-00,000	100,104	.,,,,,,,,
03/01/2034	5,000	3.850	2,540,208	2,545,208	5,085,416	486,166	4,599,250
09/01/2034			2,540,112	2,540,112			
03/01/2035	5,000	3.900	2,540,112	2,545,112	5,085,224	486,147	4,599,076
09/01/2035	5 000	2.050	2,540,014	2,540,014	5 005 000	100 100	4 500 000
03/01/2036	5,000	3.950	2,540,014 2,539,916	2,545,014 2,539,916	5,085,029	486,129	4,598,900
03/01/2037	5,000	4.010	2,539,916	2,539,916	5,084,831	486,110	4,598,721
09/01/2037	5,000	4.010	2,539,815	2,539,815	3,004,031	400,110	4,550,721
03/01/2038	3,375,000	4.050	2,539,815	5,914,815	8,454,631	808,263	7,646,368
09/01/2038			2,471,472	2,471,472			
03/01/2039	3,510,000	4.170	2,471,472	5,981,472	8,452,943	808,101	7,644,842
09/01/2039	2 255 200	4 470	2,398,288	2,398,288	0 454 570	007.074	7 040 005
03/01/2040	3,655,000	4.170	2,398,288	6,053,288	8,451,576	807,971	7,643,605
09/01/2040 03/01/2041	3,810,000	4.170	2,322,081 2,322,081	2,322,081 6,132,081	8,454,163	808,218	7,645,945
09/01/2041	0,010,000	4.170	2,242,643	2,242,643	0,101,100	000,210	7,040,040
03/01/2042	3,970,000	4.170	2,242,643	6,212,643	8,455,286	808,325	7,646,960
09/01/2042			2,159,868	2,159,868			
03/01/2043	4,135,000	4.170	2,159,868	6,294,868	8,454,737	808,273	7,646,464
09/01/2043			2,073,654	2,073,654		*******	= 011 000
03/01/2044	4,305,000	4.220	2,073,654	6,378,654	8,452,307	808,041	7,644,266
09/01/2044 03/01/2045	4,490,000	4.220	1,982,818 1,982,818	1,982,818 6,472,818	8,455,636	808,359	7,647,277
09/01/2045	4,430,000	7.220	1,888,079	1,888,079	0,400,000	000,000	7,047,277
03/01/2046	4,675,000	4.220	1,888,079	6,563,079	8,451,158	807,931	7,643,227
09/01/2046			1,789,437	1,789,437			
03/01/2047	4,875,000	4.220	1,789,437	6,664,437	8,453,873	808,190	7,645,683
09/01/2047	E 000 000	4 000	1,686,574	1,686,574	0.450.440	000 404	7 645 007
03/01/2048	5,080,000	4.220	1,686,574	6,766,574	8,453,148	808,121	7,645,027
03/01/2048	5,295,000	4.320	1,579,386	1,579,386 6,874,386	8,453,772	808,181	7,645,591
09/01/2049	0,290,000	4.320	1,465,014	1,465,014	0,403,112	000,181	7,040,091
03/01/2050	5,525,000	4.320	1,465,014	6,990,014	8,455,028	808,301	7,646,727
09/01/2050			1,345,674	1,345,674			
03/01/2051	5,760,000	4.320	1,345,674	7,105,674	8,451,348	807,949	7,643,399
09/01/2051	6.040.000	4 000	1,221,258	1,221,258	0.450.515	202.021	7 644 45-
03/01/2052	6,010,000	4.320	1,221,258 1,091,442	7,231,258	8,452,516	808,061	7,644,455
03/01/2052	6,270,000	4.320	1,091,442	1,091,442 7,361,442	8,452,884	808,096	7,644,788
09/01/2053	0,270,000	7.020	956,010	956,010	0,402,004	000,030	7,044,700
03/01/2054	6,540,000	4.320	956,010	7,496,010	8,452,020	808,013	7,644,007
09/01/2054			814,746	814,746	347.5545.55		
03/01/2055	6,825,000	4.420	814,746	7,639,746	8,454,492	808,249	7,646,243
09/01/2055	2,000		663,914	663,914			
03/01/2056	7,125,000	4.420	663,914	7,788,914	8,452,827	808,090	7,644,737
09/01/2056 03/01/2057	7,440,000	4.420	506,451	506,451 7 946 451	8,452,902	808,097	7,644,805
09/01/2057	7,440,000	4.420	506,451 342,027	7,946,451 342,027	0,402,302	000,097	7,044,000
03/01/2058	7,770,000	4.420	342,027	8,112,027	8,454,054	808,208	7,645,846
09/01/2058	. ,. 10,000		170,310	170,310	-,,	555,200	. ,515,546
03/01/2059	8,110,000	4.200	170,310	8,280,310	8,450,620	807,879	7,642,741
09/01/2059			0	0			
	101 000 000		150 070 007	200 550 007	200 550 557	20.004.444	252 727 000
	121,280,000		159,278,697	∠80,558,697	280,558,697	26,821,411	253,737,286

EXHIBIT E:

		rvice Sche					
					Annual		
Payment	Par	Coupon		Debt	Debt	Prior	Combine
Date	Amount	(%)	Interest	Service	Service	D/S	D/S
09/01/2019			2,579,761	2,579,761			
03/01/2020	0	2.250	2,579,761	2,579,761	5,159,522	5,095,585	10,255,1
09/01/2020			2,579,761	2,579,761	-,,,,,,,,,	-,,	,
03/01/2021	0	2.500	2,579,761	2,579,761	5,159,522	5,101,354	10,260,8
09/01/2021			2,579,761	2,579,761			
03/01/2022	5,000	2.630	2,579,761	2,584,761	5,164,522	4,174,122	9,338,6
09/01/2022			2,579,695	2,579,695			
03/01/2023	1,755,000	2.770	2,579,695	4,334,695	6,914,391	1,614,580	8,528,9
09/01/2023	210,000	2.920	2,555,389	2,555,389	6 220 777	2 205 205	0.626.0
03/01/2024 09/01/2024	210,000	2.920	2,555,389 2,552,323	2,765,389 2,552,323	5,320,777	3,205,306	8,526,0
03/01/2025	200,000	3.060	2,552,323	2,752,323	5,304,645	3,221,131	8,525,7
09/01/2025	200,000	0.000	2,549,263	2,549,263	0,001,010	0,221,101	0,020,1
03/01/2026	185,000	3.210	2,549,263	2,734,263	5,283,525	3,245,943	8,529,4
09/01/2026			2,546,293	2,546,293			
03/01/2027	170,000	3.340	2,546,293	2,716,293	5,262,587	3,264,338	8,526,9
09/01/2027			2,543,454	2,543,454			
03/01/2028	160,000	3.480	2,543,454	2,703,454	5,246,909	3,281,470	8,528,3
09/01/2028			2,540,670	2,540,670			
03/01/2029	5,000	3.580	2,540,670	2,545,670	5,086,341	3,427,343	8,513,6
09/01/2029	5 000	2.050	2,540,581	2,540,581	E 000 100	2 446 647	0.520.7
03/01/2030	5,000	3.650	2,540,581	2,545,581	5,086,162	3,446,617	8,532,7
03/01/2030	5.000	3.710	2,540,490 2,540,490	2,540,490	5 005 070	3,448,912	0.524.0
09/01/2031	5,000	3.7 10	2,540,490	2,545,490 2,540,397	5,085,979	3,440,312	8,534,8
03/01/2032	5,000	3.750	2,540,397	2,545,397	5,085,794	3,445,126	8,530,9
09/01/2032		511.55	2,540,303	2,540,303		-1	10,000,000
03/01/2033	5,000	3.800	2,540,303	2,545,303	5,085,606	3,445,946	8,531,5
09/01/2033			2,540,208	2,540,208			
03/01/2034	5,000	3.850	2,540,208	2,545,208	5,085,416	3,445,944	8,531,3
09/01/2034			2,540,112	2,540,112			
03/01/2035	5,000	3.900	2,540,112	2,545,112	5,085,224	3,445,462	8,530,6
09/01/2035	5 000	2.050	2,540,014	2,540,014	F 005 000	2 440 004	0.534.6
03/01/2036	5,000	3.950	2,540,014	2,545,014	5,085,029	3,448,994	8,534,0
09/01/2036 03/01/2037	5,000	4.010	2,539,916 2,539,916	2,539,916 2,544,916	5,084,831	3,449,377	8,534,2
09/01/2037	5,000	4.010	2,539,815	2,539,815	5,004,031	3,445,311	0,004,2
03/01/2038	3,375,000	4.050	2,539,815	5,914,815	8,454,631	0	8,454,6
09/01/2038	-,-,-,-	117.7	2,471,472	2,471,472	-, , , ,		-,,-,,,-
03/01/2039	3,510,000	4.170	2,471,472	5,981,472	8,452,943	0	8,452,9
09/01/2039			2,398,288	2,398,288			
03/01/2040	3,655,000	4.170	2,398,288	6,053,288	8,451,576	0	8,451,5
09/01/2040			2,322,081	2,322,081			
03/01/2041	3,810,000	4.170	2,322,081	6,132,081	8,454,163	0	8,454,1
09/01/2041	2 070 000	4 170	2,242,643	2,242,643	0 455 205	0	0 455
03/01/2042 09/01/2042	3,970,000	4.170	2,242,643 2,159,868	6,212,643 2,159,868	8,455,286	U	8,455,2
03/01/2042	4,135,000	4.170	2,159,868	6,294,868	8,454,737	0	8,454,7
09/01/2043	4,133,000	4.170	2,073,654	2,073,654	0,434,737	Ü	0,404,7
03/01/2044	4,305,000	4.220	2,073,654	6,378,654	8,452,307	0	8,452,3
09/01/2044	1,000,000		1,982,818	1,982,818	-,,		.,,,,,,,
03/01/2045	4,490,000	4.220	1,982,818	6,472,818	8,455,636	0	8,455,6
09/01/2045			1,888,079	1,888,079			
03/01/2046	4,675,000	4.220	1,888,079	6,563,079	8,451,158	0	8,451,1
09/01/2046			1,789,437	1,789,437			
03/01/2047	4,875,000	4.220	1,789,437	6,664,437	8,453,873	0	8,453,8
09/01/2047	F 000 000	4 000	1,686,574	1,686,574	0.150.440	•	0.450.4
03/01/2048	5,080,000	4.220	1,686,574	6,766,574	8,453,148	0	8,453,1
09/01/2048	£ 00£ 000	4 200	1,579,386	1,579,386	0.450.770	•	0.450.7
03/01/2049 09/01/2049	5,295,000	4.320	1,579,386 1,465,014	6,874,386 1,465,014	8,453,772	0	8,453,7
03/01/2050	5,525,000	4.320	1,465,014	6,990,014	8,455,028	0	8,455,0
09/01/2050	0,020,000	4.020	1,345,674	1,345,674	0,400,020	·	0,400,0
03/01/2051	5,760,000	4.320	1,345,674	7,105,674	8,451,348	0	8,451,3
09/01/2051			1,221,258	1,221,258			
03/01/2052	6,010,000	4.320	1,221,258	7,231,258	8,452,516	0	8,452,5
09/01/2052			1,091,442	1,091,442			
03/01/2053	6,270,000	4.320	1,091,442	7,361,442	8,452,884	0	8,452,8
09/01/2053			956,010	956,010			
03/01/2054	6,540,000	4.320	956,010	7,496,010	8,452,020	0	8,452,0
09/01/2054			814,746	814,746	0.451.15	721	
03/01/2055	6,825,000	4.420	814,746	7,639,746	8,454,492	0	8,454,4
09/01/2055	7 105 000	4 400	663,914	663,914	9 450 907	0	9 4500
03/01/2056 09/01/2056	7,125,000	4.420	663,914 506,451	7,788,914 506,451	8,452,827	U	8,452,8
03/01/2057	7,440,000	4.420	506,451	7,946,451	8,452,902	0	8,452,9
09/01/2057	.,,		342,027	342,027	2,.32,332	·	-,,-
03/01/2058	7,770,000	4.420	342,027	8,112,027	8,454,054	0	8,454,0
					THE CONTRACT STREET		
09/01/2058			170,310	170,310			
	8,110,000	4.200	170,310 170,310	170,310 8,280,310	8,450,620	0	8,450,6

159,278,697 280,558,697 280,558,697 63,207,546 343,766,243

121,280,000