



CENTRAL VALLEY
SCHOOL DISTRICT

District-Wide Facilities Master Plan

Todd Lane Elementary School

September 1, 2016



Providing a Client-Oriented Approach to Architecture

Crabtree, Rohrbaugh & Associates, Architects

Agenda



Purpose of Facility Study: Department of Education

- Guide lines and Requirements
- District Objectives & Timeline

Process:

- Establish Guiding Principles
- Demographics / Enrollment Projections
- Research and Evaluation
 - Building / Site / Educational Program / Options
- Board / Administration / Staff Input
- Community Engagement
- Next Step
- Financing

Plancon



- Plancon:** acronym for “Planning and Construction Workbook” - via PA Dept. of Education
- ✓ Required only if District seeks State Reimbursement for Capital Improvement Projects
 - ✓ Series of Forms / Procedures used to apply for State Reimbursement – (eleven (11) steps – Plancon A - K)
 - ✓ Forms are designed to:
 - document District’s planning process
 - provide justification for a project to the public
 - ascertain compliance with state laws & regulations
 - establish level of state participation w/ cost of a project

Plancon

District Wide Feasibility Study

PDE Study Requirements:

- ✓ Provides evaluation as to each facility's ability to meet current & planned educational program requirements - both design & structure
- ✓ Identify the degree to which current facilities meet reasonably current construction standards
- ✓ Estimated costs of necessary repairs / improvements - identifies inadequacies and/or deficiencies
- ✓ Analysis of construction options



Plancon

PA Moratorium on School Projects

District must approve and submit Plancon forms prior to May 15, 2016 deadline to become eligible for state funding/reimbursement



Preliminary Maximum Eligible Reimbursement:

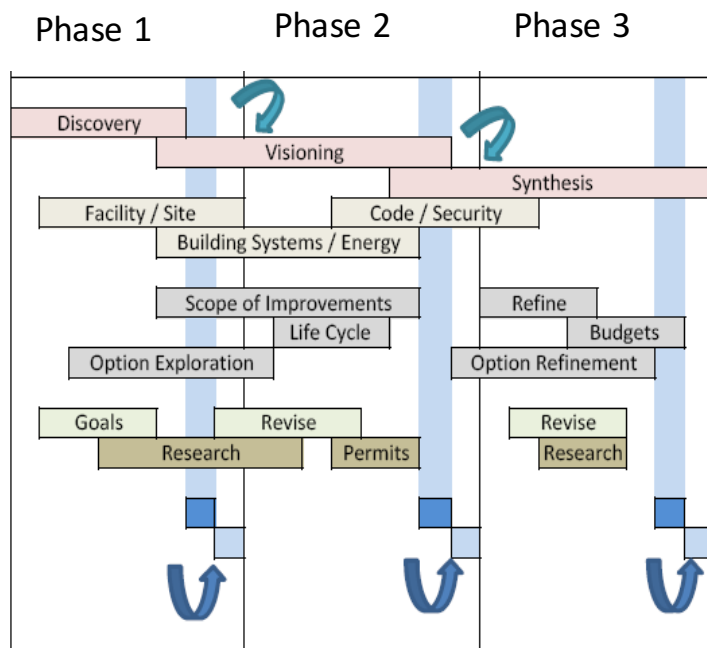
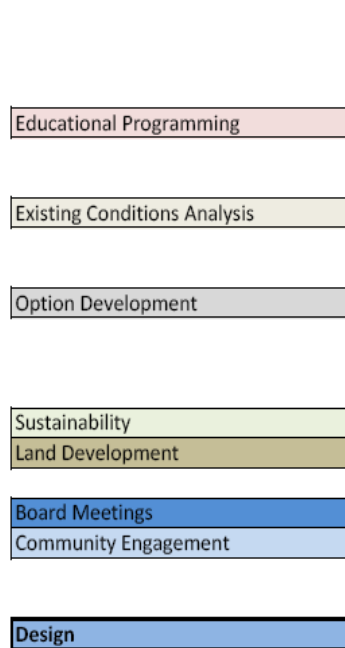
Todd Lane ES -	\$2,800,000
CV Middle School -	\$2,900,000
CV High School -	\$4,000,000

Back-end Moratorium deadline requires construction contracts be signed by July 1, 2019 to remain eligible for state reimbursement

District Objectives



Facility Study Time Line



2015

June-September

- Develop Understanding of Ed Program
- Existing Building Capacity/Facility Analysis
- Demographic / Enrollment Projections

Oct- December

- Building Condition Assessments & Review

2016

Jan- Apr

- Preliminary Improvement Costs
- Preliminary Options

May – July

- PLANCON Moratorium – A/B Submissions

Guiding Principles

Establish Priorities to guide decision making

- Air conditioning
- Technology infrastructure
- Lab spaces/STEM spaces
- Maintaining grade configurations (K-2, 3-5, 6-8, 9-12)
- Security upgrades; Building Access and Site Safety including traffic
- Space for all day Kindergarten
- Departmentalized spaces to include upgrades to the practical and related arts (music, art, FCS, etc....)
- Large group instruction spaces; flexible spaces
- Upgrades to auditorium, gymnasium, locker rooms (field house)
- Football, soccer, baseball, softball stadium upgrades (turf and lights)



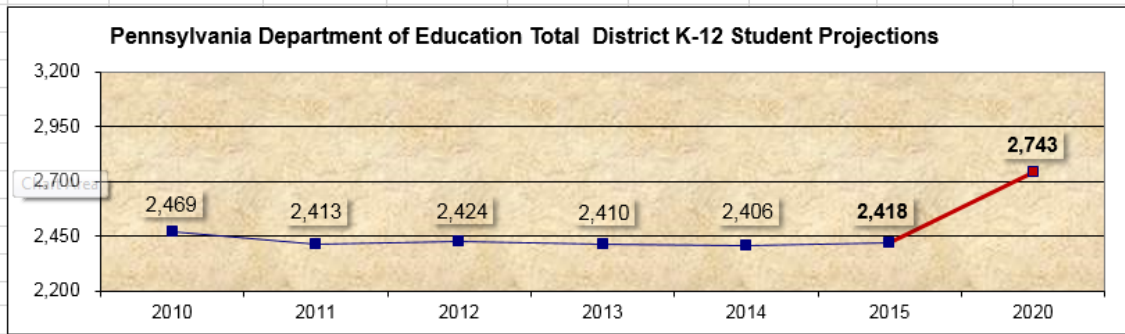


Demographics

PDE - PROJECTION METHOD						Current Year	Projections
	2010	2011	2012	2013	2014	2015	2020
*Total K-12 Student Projections	2,469	2,413	2,424	2,410	2,406	2,418	2,743
difference		(56)	11	(14)	(4)	12	325
increase / decrease		-2.3%	0.5%	-0.6%	-0.2%	0.5%	13.4%
per year							2.69%
						Year 2015 - 2020	-13.4%
							-2.7%

PA Dept. of Education K-12 Projections

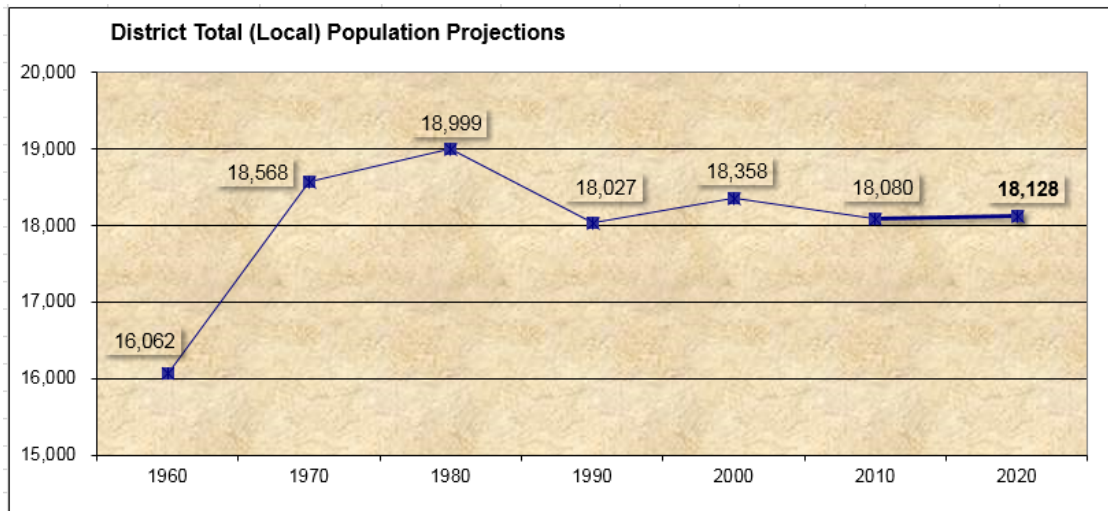
- ✓ PDE projections based on live births only
- ✓ PDE projections dictate a significant increase in K-12 enrollment in the next 4 years – 325 student increase in the next 4 years
- ✓ Historic trends dictate a stable enrollment, a significant increase of 325 students within a 4-year period appears unrealistic
- ✓ PDE projections may appear to be unreliable as enrollment data pre-date 2009 merger



Source – Pa Department of Education

Demographics

Local (School District)	1960	1970	1980	1990	2000	2010	Projection 2020
Center Township	7,113	10,598	10,733	10,742	11,492	11,795	12,353
rate of increase/decrease		49.0%	1.3%	0.1%	7.0%	2.6%	4.7%
		3485	135	9	750	303	558
Monaca Borough	8,394	7,486	7,661	6,739	6,286	5,737	5,221
rate of increase/decrease		-10.8%	2.3%	-12.0%	-6.7%	-8.7%	-9.0%
		-908	175	-922	-453	-549	-516
Potter Township	555	484	605	546	580	548	554
rate of increase/decrease		-12.8%	25.0%	-9.8%	6.2%	-5.5%	1.1%
		-71	121	-59	34	-32	6
District Total Pop.	16,062	18,568	18,999	18,027	18,358	18,080	18,128
rate of increase/decrease		15.6%	2.3%	-5.1%	1.8%	-1.5%	0.3%
increase/decrease		2,506	431	(972)	331	(278)	48



Local Population Projections

- ✓ Estimated population projections dictate continued fluctuation as an increase in local population is projected through 2020



- ✓ Robert Morris University Economic Impact Study
- ✓ Shell Corporation Assessment

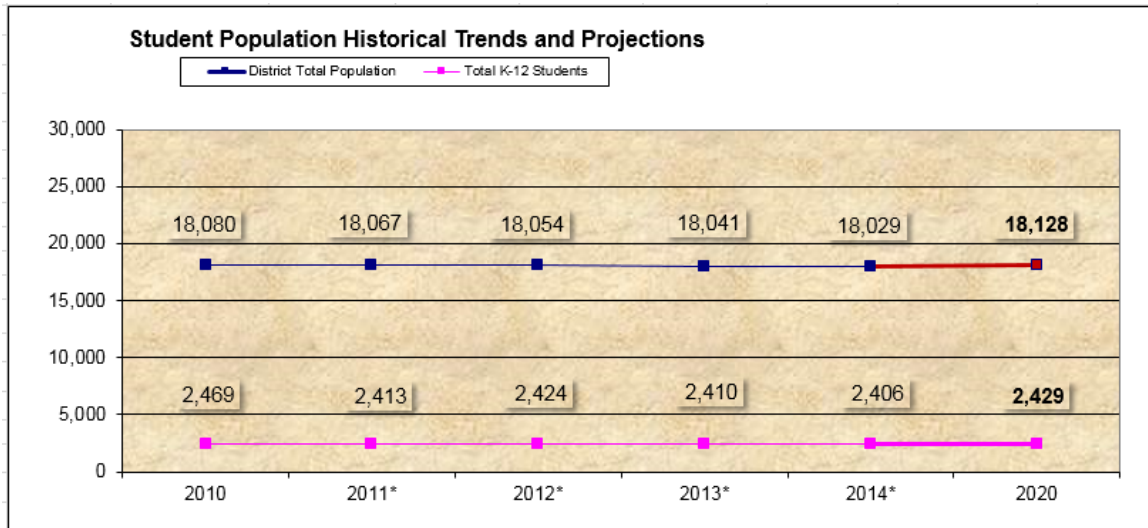
Source – US Census, Center for Rural Pa, Pa Dept of Environmental Protection

Demographics

HISTORICAL TREND - PROJECTION METHOD							Projections
	2010	2011*	2012*	2013*	2014*	2020	
District Total Population	18,080	18,067	18,054	18,041	18,029	18,128	
increase from previous decade		-0.1%	-0.1%	-0.1%	-0.1%	0.5%	
District Total K-12 Students	2,469	2,413	2,424	2,410	2,406	2,429	
		(56)	11	(14)	(4)	23	
rate of increase/decrease from prev. interval		-2.3%	0.5%	-0.6%	-0.2%	1.0%	
student increase / decrease per year		-0.45%	0.09%	-0.12%	-0.03%	0.10%	
% Students per Population	13.7%	13.4%	13.4%	13.4%	13.3%	13.4%	

Projection of Local Pop & K-12

Projecting 2020 K-12 Enrollment Based on Historic Trend at 13.4% Students to Local Pop



Source – US Census, Center for Rural Pa, CVSD, PaDEP

- ✓ Utilizing 13.4% yields approx. 2,429 K-12 student enrollment in 2020
- ✓ Yields relatively stable K-12 enrollment projection

Building Capacity & Enrollment

Capacity of Existing Buildings based on <i>CURRENT Use of Space</i>										
Elementary Schools										K - 2, 3 - 5
		Utilization Rate		Utilization Rate		Utilization Rate		Utilization Rate		
School	Current Bldg Capacity	Current Enrollment 2015	% Full Current Enrollment	Enrollment per Local Population	% Full Local Population	Current Enrollment Plus 10%	% Full Current Enroll + 10%	PDE 2020 Projected Enrollment	% Full PDE 2020 Projection	Additional Space Required ?
Centre Grange PS	650	548	84%	550	85%	603	93%	617	95%	No
Todd Lane ES	850	581	68%	584	69%	639	75%	645	76%	No
Capacity Available***	1,500	1,129	75%	1,134	76%	1,242	83%	1,262	84%	Long Term Yes*
		371		366		258		238		
Middle School										6 - 8
		Utilization Rate		Utilization Rate		Utilization Rate		Utilization Rate		
School	Current Bldg Capacity	Current Enrollment 2015	% Full Current Enrollment	Enrollment per Local Population	% Full Local Population	Current Enrollment Plus 10%	% Full Current Enroll + 10%	PDE 2020 Projected Enrollment	% Full PDE 2020 Projection	Additional Space Required ?
Middle School	685	565	82%	568	83%	622	91%	672	98%	No
	685	565	82%	568	83%	622	91%	672	98%	Long Term Yes**
Capacity Available***		120		117		64		13		
High School										9 - 12
		Utilization Rate		Utilization Rate		Utilization Rate		Utilization Rate		
School	Current Bldg Capacity	Current Enrollment 2015	% Full Current Enrollment	Enrollment per Local Population	% Full Local Population	Current Enrollment Plus 10%	% Full Current Enroll + 10%	PDE 2020 Projected Enrollment	% Full PDE 2020 Projection	Additional Space Required ?
High School	1,100	724	66%	727	66%	796	72%	809	74%	
	1,100	724	66%	727	66%	796	72%	809	74%	No**
Capacity Available***		376		373		304		291		
Total Enrollments		2,418		2,429		2,660		2,743		

Methodology:

- What do the current facilities accommodate?
- What are reasonable projections?
- What future educational program needs will there be?
- Short & Long term plan



Renovation Costs

Develop an understanding of the work required to bring existing school facilities up to current construction standards – PA Dept. of Education

- Review of ALL District Facilities
- Address Guiding Principles
- Comprehensive Renovations – **20-Year Reimbursement Cycle**
 - Address Educational Program Requirements
 - Building Envelope Assessment; Architectural, Interior Environments, Finishes, Casework etc.
 - Building & Site: Code / Life Safety / ADA Compliance
 - Building Systems Evaluation and Recommendations
 - HVAC, Electrical, Plumbing, Technology
- Architectural / Engineering Reports

<http://www.centralvalleysd.org/FeasibilityStudy.aspx>

OPTION 1 – a. Comprehensive Scope Renovation

b. Reduced Scope Renovation

Kindergarten Addition to Center Grange – Full-Day K

Addition & Renovations to Todd Lane ES

Renovations to CV Middle School

Renovations Only to CV High School

OPTION 1A

Kindergarten Addition to Center Grange – Full Day K

Addition & **Reduced Scope** Renovations to Todd Lane ES

Reduced Scope Renovations to CV Middle School

New Gym Addition & Reduced Scope Renovations to CV High School

OPTION 1B

Kindergarten Addition to Center Grange – Full Day K

Addition & **Reduced Scope** Renovations to Todd Lane ES

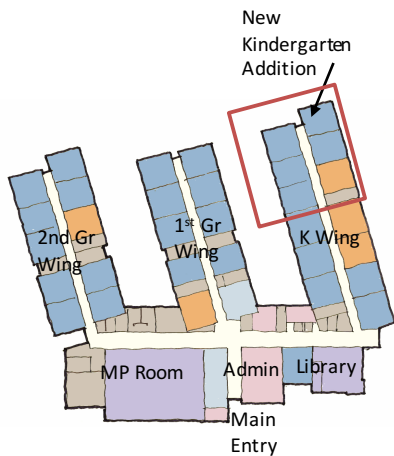
Reduced Scope Renovations to CV Middle School

Extensive Additions & Reduced Scope Renovations to CVHS

Preliminary Options



Option 1 – Comprehensive Scope Summary



K-2 Centre Grange PS
 5 Kindergarten Clrm Addition Only
 No Renovations
 Estimated TPC = \$1.9 - \$2.1 M



3-5 Todd Lane ES
 5,000 SF Kitchen Addition
 Comprehensive Architectural / MPE Reno
 Estimated TPC = \$14.8 - \$16.8 M



6-8 CV Middle School
 Comprehensive Architectural / MPE
 Renovations Only
 Estimated TPC = \$17 M - \$19 M



9-12 CV High School
 Comprehensive Architectural / MPE
 Renovations Only
 Estimated TPC = \$25.5 M - \$29 M

Option 1 Total All Buildings Comprehensive Scope = \$59.2 M – \$66.9 M Total Project Costs (TPC)
 Phase One Stadium Improvements – (Turf, Scoreboard, Field Lighting, Pedestrian Access, Storm water) = \$1.25 M TPC

OPTION 2

Kindergarten Addition to Center Grange – Full Day K

Addition & **Reduced** Scope of Renovations to Todd Lane ES

Vacate Existing CV Middle School

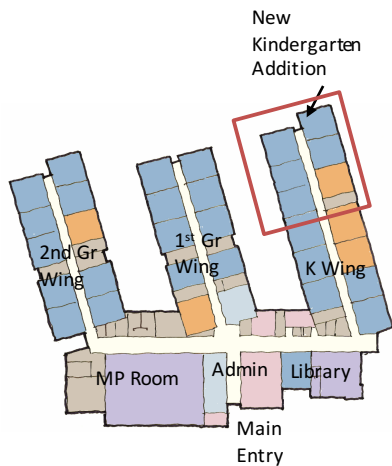
CONVERT Existing CV High School to 6-8 CV Middle School

Construct NEW 9 -12 CV High School

Preliminary Options



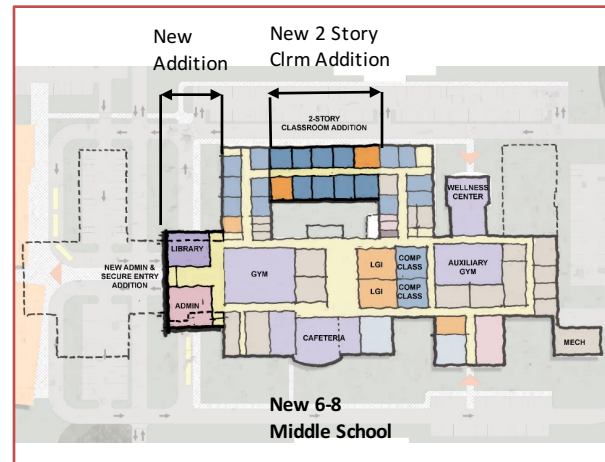
Option 2 - Summary



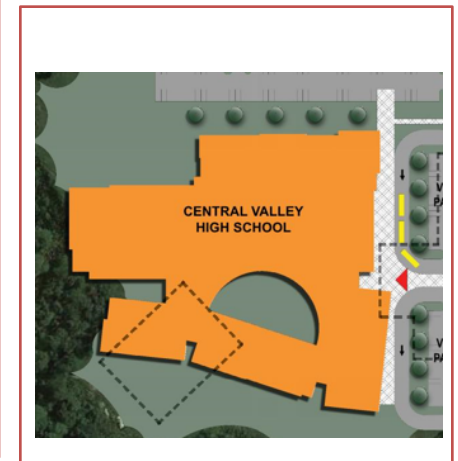
K-2 Centre Grange PS
 5 Kindergarten Clrm Addition Only
 No Renovations
 Estimated TPC = \$2 M



3-5 Todd Lane ES
 5,000 SF Kitchen Addition
 Reduced Scope Architectural / MPE
 Renovations
 Estimated TPC = \$12.5 M



Vacate Existing CV Middle School
Convert 9-12 CVHS to 6-8 CV Middle School
 New Admin, Library and Classroom Additions
 Reduced Scope Existing To Remain Architectural /
 MPE Renovations
 Estimated TPC = \$29 M



NEW 9-12 CV High School
 Estimated TPC = \$43 M
 Representation Building Footprint Only

Option 2 - Total All Buildings Scope of Work = \$86.5 M Total Project Costs
 Phase One Stadium Improvements – (Turf, Scoreboard, Field Lighting, Pedestrian Access, Storm water) = \$1.25 M TPC

OPTION 3

Kindergarten Addition to Center Grange – Full Day K
Vacate Existing Todd Lane ES – Demolish / Construct
parking/playfields

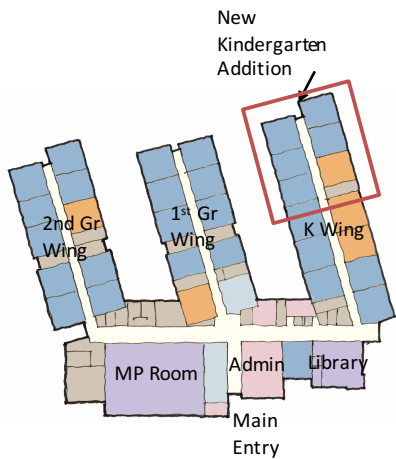
Vacate Existing CV Middle School

***CONVERT Existing CV High School to CV Intermediate
Grades 3-8 Construct NEW CV High School***

Preliminary Options



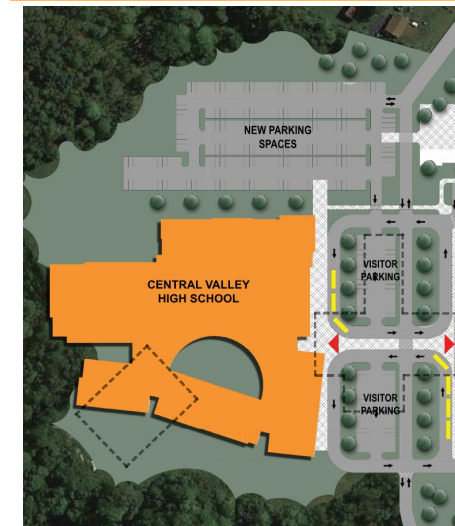
Option 3 - Summary



K-2 Centre Grange PS
 5 Kindergarten Clrm Addition Only
 No Renovations
 Estimated TPC = \$2 M



Vacate Todd Lane ES and CV Middle School
Convert 9-12 CVHS to 3-8 CV Middle School
 New Administration, Library and Classroom Wing Additions
 Reduced Scope Existing To Remain Architectural / MPE Renovations
 Estimated TPC = \$38 M



NEW 9-12 CV High School
 Estimated TPC = \$43 M
 Representation Building Footprint Only

Option 3 - Total All Buildings Scope of Work = \$83 M Total Project Costs
 Phase One Stadium Improvements – (Turf, Scoreboard, Field Lighting, Pedestrian Access, Storm water) = \$1.25 M TPC

OPTION 4

Kindergarten Addition to Center Grange – Full Day K
Addition & **Reduced** Scope of Renovations
to Todd Lane ES

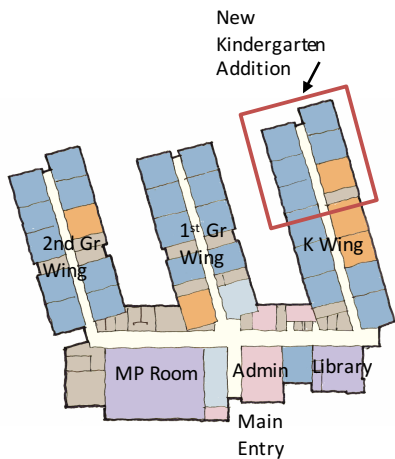
Vacate CV Middle School

*Convert Existing CV High School to combined
HS/MS Grades 6 - 12*

Preliminary Options



Option 4 - Summary



K-2 Centre Grange PS
 5 Kindergarten Clrm Addition Only
 No Renovations
 Estimated TPC = \$2 M



3-5 Todd Lane ES
 5,000 SF Kitchen Addition
 Reduced Scope Architectural / MPE
 Renovations
 Estimated TPC = \$12.5 M



Vacate CV Middle School
Convert 9-12 CVHS to 6 - 12 CV Middle School / High School
 New Gymnasium, Auditorium, Administration, Library and Classroom Wing
 Additions
 Reduced Scope Existing To Remain Architectural / MPE Renovations
 Estimated TPC = \$55 M

Option 4 - Total All Buildings Scope of Work = \$69.5 M Total Project Costs
 Phase One Stadium Improvements – (Turf, Scoreboard, Field Lighting, Pedestrian Access, Storm water) = \$1.25 M TPC

New Building Cost Comparison

Middle School Option Costs Comparison

Comprehensive Renovations Only to CV Middle School	\$17 M - \$19 M
Construct NEW 700 Capacity 6 - 8 CV Middle School	\$30.5 M

High School Option Costs Comparison

Comprehensive Renovations Only to CVHS	\$25.5 M - \$29 M
New Gymnasium & Reduced Scope Renovations to CVHS	\$32 M
<u>Comprehensive Additions</u> & Reduced Scope Renovations to CVHS	\$41 M
Construct NEW 950 Capacity 9 – 12 CVHS	\$43 M

*All Total Project Costs Dependent on Final Educational Program / Scope of Work

*Costs do not include any land acquisition costs

Budget Item	Quantity	Cost Range
Athletic Stadium		
Field Turf		\$300,000 to \$500,000
Storage Building Renovation		CRA
Scoreboard		\$15,000 to \$25,000
Field Lighting		\$325,000 to \$450,000
Pedestrian Access (concrete stairs & ramp to field)		\$120,000 to \$170,000
Additional Sideline space		n/a
Additional Seating (adding 20% to ex. seating capacity)	600 seats	\$200,000 to \$230,000
Field House Construction		CRA
Storm drainage on west side of stadium		\$80,000 to \$150,000
Overflow Parking on adjacent property	200 cars	\$550,000 to \$650,000
Tennis Courts		
Reconstruction of Tennis Courts	4-courts	\$190,000 to \$275,000
Baseball Field		
Regrading of Outfield		\$40,000 to \$55,000
Softball Field		
Installation of a net along the right field line	150 ft	\$18,000 to \$ 25,000
Monaca Football Field		
Field House renovations		CRA
Field renovations		

Other Costs Considerations

- ✓ High School Stadium
 - ✓ Turf Replacement
 - ✓ Stadium Lighting
 - ✓ Additional Bleacher Seating
 - ✓ Score Boards
 - ✓ Pedestrian Access, Ramps & Stairs
 - ✓ Field House– TBD
 - ✓ Storm Water Issues
 - ✓ Overflow Parking
 - ✓ New Tennis Courts (4)
 - ✓ Regarding of Baseball Field
 - ✓ Softball Field Net
 - ✓ Monaca Filed Costs – Scope TBD

Todd Lane Elementary School Scope

HVAC Scope

\$68/SF

- Replace existing HVAC system in its entirety
- Replace existing multizone RTUs with VAV RTUs
- New supply/return ductwork
- Dedicated terminal boxes for each room
- New heating plant
- New direct digital control system

Plumbing/FP Scope

- Replace existing above-grade plumbing system in its entirety
- Reuse existing below-grade sanitary and storm piping
- New domestic water heater
- Replace all toilet room fixtures
- Install full building wet sprinkler system

Option 1A – Comprehensive Scope



3-5 Todd Lane ES

5,000 +/- SF Kitchen Addition

Complete Architectural / MPE Renovations

Estimated TPC = **\$16 M**

Option 1A – Comprehensive Scope

Electrical Scope

- Replace all existing electrical distribution equipment (main switchboard, panelboards, feeders)
- Coordinate with utility company to replace existing vault mounted transformer
- Upgrade electric service to accommodate new loads related to cooling equipment
- Replace existing emergency generator with exterior pad mounted generator
- Replace existing receptacles and branch circuit wiring
- Replace existing fire alarm system
- Replace cable TV system with newer technology that utilizes building data network
- Replace existing security system
- Replace existing lighting with LED fixtures
- Add lighting controls
- Install classroom AV systems that include voice amplification and interactive LCD projector/marker board
- Replace existing data cabling
- Remove and replace existing public address system



3-5 Todd Lane ES

5,000 +/- SF Kitchen Addition

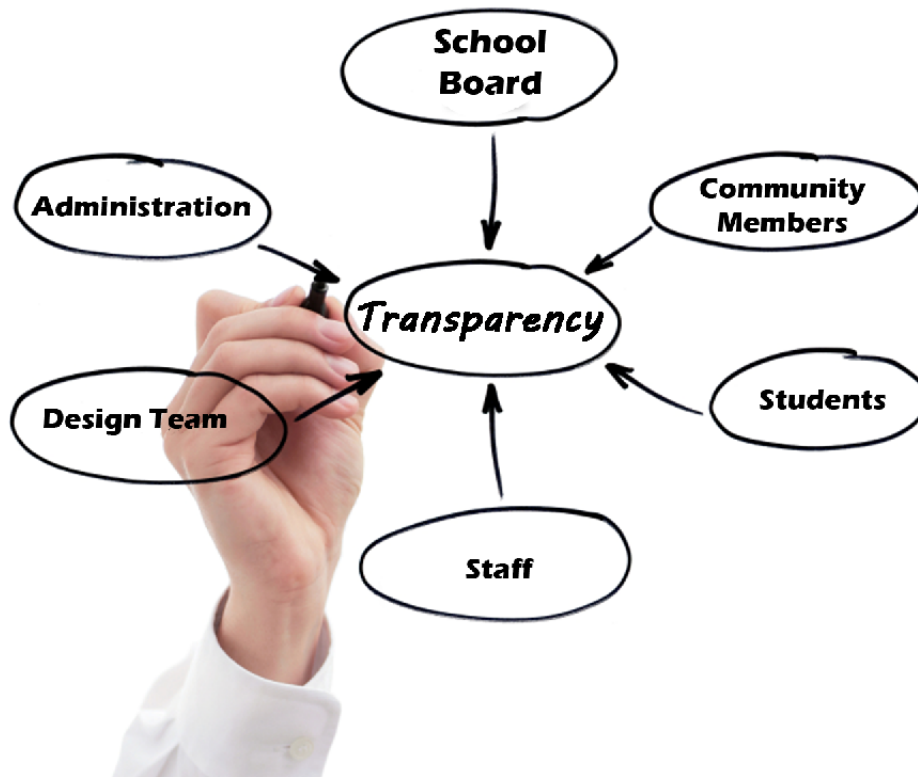
Complete Architectural / MPE Renovations

Estimated TPC = **\$16 M**

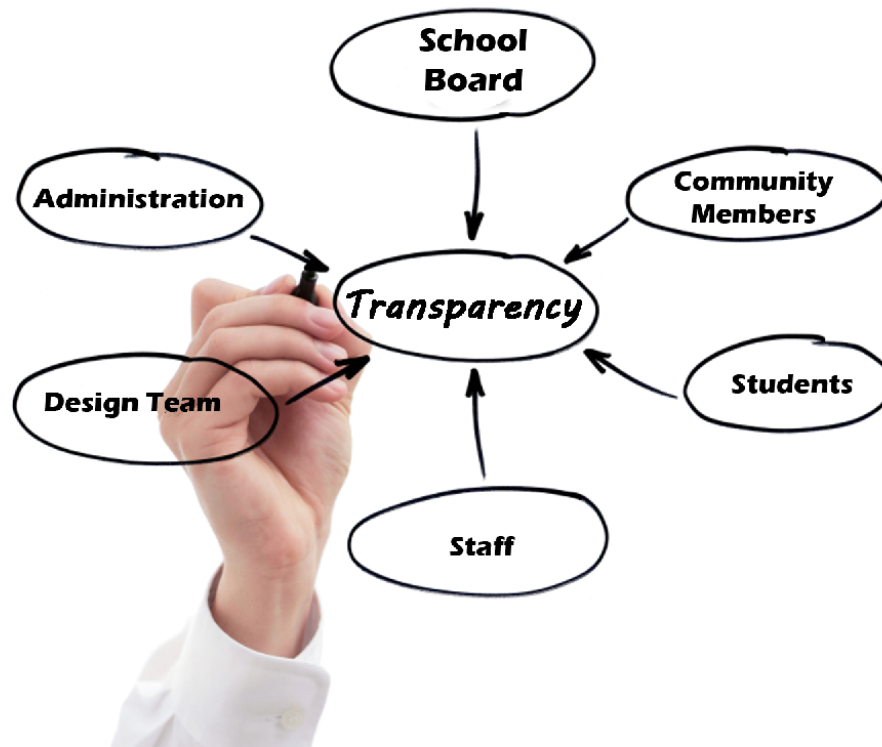
Community Engagement Team

Primary Goal:

- Ensure Accurate and Timely Information is shared
- Inform the group of the Process
- Presentations / Updates
- Provide input to the Board
- Establish Community Partnerships



Community Engagement Team



Members consist of:

- CVEA Union President
- CVESP Union President
- CVEF President
- President of Center Township Commissioners
- President of Potter Township Commissioners
- Monaca Borough Manager
- Mayor of Monaca
- President of CV PTA

Next Step(s)



Public Presentations / Monthly Board Meetings

Schedule Part A/B Review with PA Department OF Education

Detailed Building Survey & Program Verification

Begin Staff Discussions / Interior Layouts

Phasing Discussion

Review Detailed Budget and Scope September/October

PLANCON

Parts D & E Design Development – November/December

Part F Construction Documents – January/February

Bidding March/April

Todd Lane ES Construction – Summer 2017; 15 months

CV Middle School, CV High School, Center Grange Planning Begins

Financing Discussion

\$10,000,000 = \$361,000 debt service

Revenue – Act 1

- Tax increases to the index = 1.5 mills
- Apply for the exceptions = 0.9 mills
- 2.4 mills = \$700,000

Shell Plant

- PILOT Zone – No new revenue
- Unknowns
 - Spin Off Revenue
 - Mercantile Tax, Real Estate Transfer Tax, New Business, Wage Tax



CENTRAL VALLEY
SCHOOL DISTRICT



CENTRAL VALLEY SCHOOL DISTRICT

Financing Discussion

- TIF Revenue
 - 2020-2021 Eliminate bond payment good for approximately \$430,000
- Conservative Approach
 - Cannot afford to do nothing
 - Todd Lane has greatest immediate need
- Challenges
 - PSERS
 - Health Premiums
 - Basic Education Funding Formula
 - Labor Contracts



CENTRAL VALLEY SCHOOL DISTRICT

Questions can be submitted via the District website. An FAQ document will be created and posted. A follow up meeting will be held on Thursday, September 8, 2016 @ 7:00 P.M. in the Central Valley High School Auditorium to address questions.



Providing a Client-Oriented Approach to Architecture

Crabtree, Rohrbaugh & Associates, Architects