



# Lewiston-Porter Central School District 2020 Building Condition Survey



# TA Process - BCS

- Meetings with District Representatives to Review Each Building:
  - MEP (Mechanical, Electrical, Plumbing) engineers
  - Architects
  - Structural Engineer
  - Civil Engineer
- Team members complete field work after meeting.
- Team members review the following to assist with determining the age of the materials and equipment:
  - Existing as-built drawings
  - Last completed BCS
- Field notes/observations were analyzed and put into the BCS form.
- Meet with District representatives to review findings and get further input.
- Upload to SED by March 1, 2021

<b>Name</b>	<b>Role, Years In Field</b>
<b>Brad V. Vaillancourt, AIA, CSI, LEED AP BD+C</b>	Principal-in-Charge, 17
<b>John W. Sisting, RA, LEED AP, NCARB</b>	Project Manager, 20
<b>Charles W. Moore, RA, LEED AP</b>	Project Architect, 40
<b>Paul R. Rosnak, PE</b>	Mechanical/Plumbing Engineering, 40
<b>Ivan McMillan, LC, LEED AP</b>	Electrical Engineering, 40
<b>Robert P. Stelianou, PE, F NSPE, LEED AP, CBIE</b>	Civil/Structural Engineering, 40

# 2020 Building Condition Survey

## 2020 BUILDING CONDITION SURVEY - 2020

### Building Information

#### Building Information

1. Name of school district
2. SED District 8-Digit BEDS Code
3. Building Name:
4. SED 4-Digit Facility Code:
5. Survey Inspection Date:
6. Building 911 Address:
7. City:
8. Zip Code:
9. Certificate of Occupancy Status:
  - A - Annual
  - T - Temporary
  - N - None

#### 10. Certificate of Occupancy Expiration Date:

10a. Is this a manufactured building? (Relocatable, modular, portable)

- Yes
- No

#### Building Age, Gross Square Footage and Maintenance Staff

##### 11. Building Age

	Year
Original Construction	
Addition #1	
Addition #2	
Addition #3	
Addition #4	
Addition #5	
Addition #6	

##### 12. Square feet of construction

	Sq Feet
Original construction	
Addition #1	
Addition #2	
Addition #3	
Addition #4	
Addition #5	
Addition #6	

##### 13. Gross square ft. of Building as currently configured:

##### 14. Number of Floors:

##### 15. How many full-time and part-time custodians are employed at the school (or work in the building)?

	Count Employees
Full-time custodians:	
Part-time custodians:	

## 2020 BUILDING CONDITION SURVEY - 2020

### HVAC Systems

#### HVAC Systems

##### 89. Heat Generating Systems (H)

- Yes
- No

##### 89a. Heat generation source (check all that apply):

- Biomass
- Boiler / Hot Water
- Boiler / Steam
- Cogeneration Plant
- Electric
- Furnace / Forced Air
- Geothermal
- Heat Pump
- Unit Ventilation
- Other (describe below)

##### 89a.1 Other heat generation source:

##### 89b. Overall condition of heat generating systems:

- Excellent
- Satisfactory
- Unsatisfactory
- Non-Functioning
- Critical Failure

##### 89c. Year of Last Major Reconstruction/Replacement:

##### 89d. Expected Remaining Useful Life (Years):

##### 89e. Cost to Reconstruct/Replace \$:

##### 89f. Comments:

##### 90. Ventilation System (exhaust fans, etc) (H)

- Yes
- No

##### 90a. Type of ventilation system (check all that apply)

- Natural ventilation
- Central system
- Energy recovery ventilator
- Rooftop units
- Unitary (UVs, FC/BC, PTAC)
- Forced air furnace
- Heat pump
- Split system/ variable refrigerant
- Powered relief air system
- Gravity/barometric relief
- Other (specify)

##### 90b. If "Other" please specify here

##### 90c. Overall condition of ventilation systems

- Excellent
- Satisfactory
- Unsatisfactory
- Non-functioning
- Critical Failure

##### 90d. Year of last major reconstruction/replacement

##### 90e. Expected remaining useful life (years):

##### 90f. Cost to reconstruct/replace \$:

##### 90g. Comments

# Building Condition Survey

2020 BUILDING CONDITION SURVEY - 2020

HVAC Systems

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## 90. Ventilation System (exhaust fans, etc) (H)

- Yes  
 No

### 90a. Type of ventilation system (check all that apply)

- |  |   |
|--|---|
| <input type="checkbox"/> Natural ventilation                   | <input type="checkbox"/> Heat pump                            |
| <input type="checkbox"/> Central system                        | <input type="checkbox"/> Split system/variable refrigerant    |
| <input type="checkbox"/> Energy recovery ventilator            | <input checked="" type="checkbox"/> Powered relief air system |
| <input type="checkbox"/> Rooftop units                         | <input checked="" type="checkbox"/> Gravity/barometric relief |
| <input checked="" type="checkbox"/> Unitary (UVs, FC/BC, PTAC) | <input type="checkbox"/> Other (specify)                      |
| <input type="checkbox"/> Forced air furnace                    |   |

### 90b. If "Other" please specify here

### 90c. Overall condition of ventilation systems

- Excellent  
 Satisfactory  
 Unsatisfactory  
 Non-functioning  
 Critical failure

90d. Year of last major reconstruction/replacement: 2000

90e. Expected remaining useful life (years): 5

90f. Cost to reconstruct/replace: \$2,706,000

### 90g. Comments

Replace sixty-four (64) unit ventilators. Replace AHU serving Gym & Cafeteria. Relocate shop dust collector outside and provide fresh air. Add eight (8) range hoods in Home Economic Classrooms.

# BCS Enhanced Services - Five Year Plan

Five Year Capital Facilities Plan																
District Name: <b>Lewiston-Porter Central School District</b>		Units LUMP SUM EACH		System Type H = Health and Safety S = Structure C = Comfort A = Aesthetic		System Rating E = Excellent S = Satisfactory U = Unsatisfactory NF = Non-Functioning CF = Critical Failure		Cost Type NEW = New Building ADD = Addition ALT = Alteration MR = Major System Replacement REP = Repair ENG = Energy MNT = Maintenance		Prepared by:  <b>TRAUTMAN ASSOCIATES</b> ARCHITECTS / ENGINEERS Fall 2020						
Building Name: <b>Middle School</b>		SF = Square Feet LF = Linear Feet		C = Comfort A = Aesthetic		NF = Non-Functioning CF = Critical Failure										
SED Number: <b>40-03-01-06-0-004</b>																
Line Number	Description	Priority	System Type	System Rating	Date of Last Major Reconstruction	Probable Useful Life Remaining	Cost Type	Quantity	Unit	Unit Cost	Total Cost Year 1 (2021)	Total Cost Year 2 (2022)	Total Cost Year 3 (2023)	Total Cost Year 4 (2024)	Total Cost Year 5 (2025)	Remarks
<b>83-00</b>	<b>Interior Stairs</b>		H	S	2000	10										
<b>84-00</b>	<b>Elevators, Lifts and Escalators</b>		H	U	2000	2										
84-01	Replacement of interior lift from the basement to the 1st floor	2	H	U		2	MR		LUMP SUM	\$132,000		\$132,000				The existing interior lift is old and repairing may be difficult
<b>85-00</b>	<b>Swimming Pool and Swimming Systems</b>					NA										
<b>86-00</b>	<b>Interior Bleachers</b>					NA										
<b>89-00</b>	<b>Heat Generating Systems</b>		H	U	1991	5										
89-01	Cast iron steam boiler replacement	5	H	U		5	MR		LUMP SUM	\$363,000					\$363,000	Cast iron steam boiler near end of life expectancy
<b>90-00</b>	<b>Ventilation System (exhaust fans, etc)</b>		H	U	2000	5										
90-01	Unit ventilator replacement	5	H	U		5	MR	64	LUMP SUM	\$33,000					\$2,112,000	Nearing end of life expectancy
90-02	AHU serving Gym & Cafeteria replacement	5	H	U		5	MR		LUMP SUM	\$330,000					\$330,000	Nearing end of life expectancy
90-03	Relocation of shop dust collector outside & provide air	5	H	U		5	ALT		LUMP SUM	\$198,000					\$198,000	
90-04	Add (3) range hoods in Home Economics Classroom	5	H	U		3	ADD		LUMP SUM	\$66,000					\$66,000	
<b>91-00</b>	<b>Mechanical Cooling / Air-Conditioning Systems</b>		H	U	2007	3										
91-01	Replacement of (10) PTAC units & split systems	3	H	U		3	MR		LUMP SUM	\$184,800			\$184,800			10 of 11 PTAC units & split systems near end of life expectancy
<b>92-00</b>	<b>Piped Heating &amp; Cooling Distribution Systems:</b>		H	U	1982	2										
92-01	Steam pipe replacement	2	H	U		2	MR		LUMP SUM	\$1,650,000			\$1,650,000			Majority of steam piping is original (1957), numerous leaks & end of life expectancy
<b>93-00</b>	<b>Ducted Heating &amp; Cooling Distribution Systems</b>		H	S	2000	10										
																Minimal duct systems in gym, fitness and cafeteria
<b>94-00</b>	<b>HVAC Control Systems</b>		H	U	2000	5										
94-01	Upgrade pneumatic to all direct/digital controls	5	H	U		5	ALT		LUMP SUM	\$660,000					\$660,000	

# Five Year Plan – Categories & Sortability

Five Year Capital Facilities Plan																	
(Per Regulation 155.1(a)(4) and 155.3(c))																	
District Name: <b>Niagara Wheatfield Central School District</b>		System Type: H = Health and Safety, I = Structure, C = Comfort, A = Acoustic		System Rating: E = Excellent, S = Satisfactory, U = Unsatisfactory, F = Failure, I = Indeterminate		Cost Type: NEW = New Building, ADD = Addition, ALT = Alteration, MBR = Major System Replacement, REP = Repair, ENG = Energy, MNT = Maintenance		Prepared by: <b>TRAUTMAN ASSOCIATES</b> ARCHITECTS / ENGINEERS Date Prepared: 21 Oct 14									
Building Name: <b>Erick Road Elementary</b>		BY SORTING THE DATA WE CAN LIST BY PRIORITY, COST TYPE, SYSTEM RATING, AND REPLACEMENT YEAR					LIFE CYCLE		TYPE OF COST: SYSTEM REPLACEMENT, REPAIR, MAINTENANCE								
BED Number: <b>40-07-01-06-005</b>																	
Line Number	Description	Priority	System Type	System Rating	Date of Last Major Reconstruction	Probable Useful Life Remaining	Cost Type	Quantity	Unit	Unit Cost	Total Cost 2014 / 2015	Total Cost 2015 / 2016	Total Cost 2016 / 2017	Remarks			
1																	
2	<b>00 - UTILITY COSTS</b>																
3	Utility Cost: Natural Gas	NA	NA	NA	NA	NA	ENG				\$82,569	\$101,540	\$124,919	\$153,650	\$188,989	Assume 25% yearly cost increase.	
4	Utility Cost: Electricity	NA	NA	NA	NA	NA	ENG				\$159,583	\$178,733	\$200,181	\$224,203	\$251,107	Assume 12% yearly cost increase.	
5	Utility Cost: Water	NA	NA	NA	NA	NA	ENG				\$6,112	\$6,418	\$6,738	\$7,075	\$7,429	Assume 5% yearly cost increase.	
6																	
7	<b>27 - SITE SANITARY</b>	3	H	S	1948	5	REP	1	ump sum	\$5,000	0	0	0	0	\$5,000		
8																	
9	<b>30 - SITE ELECTRICAL</b>																
10	Provide 1,200A, 3-Phase, 120/480V Electric Service	3	H	S	1999	5	REP	1	ump sum	\$37,000	0	0	0	0	\$37,000		
11	Replace 10 60A, 208V 3-Phase Disconnects	3	H	S	1999	5	REP	1	ump sum	\$25,000	0	0	0	0	\$25,000		
12	Replace 15 Canopy Lights and 15 Wall Pads	3	H	S	1999	5	REP	1	ump sum	\$15,000	0	0	0	0	\$15,000		
13																	
14	<b>40 - PAVEMENT</b>		A	U	1980												
15	Reconstruct West Parking Lot	2	A	U	1980	2	REP	35,000	SF	\$6	0	\$210,000	0	0	0		
16	Reconstruct North Parking Lot for loading/unloading	2	A	S	2006	2	REP	21,000	SF	\$6	0	\$126,000	0	0	0		
17																	
18	<b>41 - SIDEWALKS</b>		A	U	1980												
19	Reconstruct Sidewalk Adjacent to West Parking lot	1	A	U	1980	1	REP	2,500	SF	\$6	\$15,000	0	0	0	0		
20	Reconstruct Sidewalk Adjacent to North Parking lot	1	A	U	1980	1	REP	1	SF	\$6	\$24,000	0	0	0	0		
21											0	0	0	0	0		
22	<b>49 - INTERIOR DOORS</b>	3								sum	\$31,000	0	0	0	0	\$31,000	Replace All Non-ADA Knobs on Classroom Doors
23																	
24	<b>52 - INTERIOR ELEC. DISTRIBUTION</b>		H	S	1989												
25	Replace 7 Panels	3	H	S	1989	5	REP	1	ump sum	\$120,000	0	0	0	0	\$120,000		
26	Replace 50 Duplex Receptacles	3	H	S	1989	5	REP	1	ump sum	\$5,000	0	0	0	0	\$5,000		
27																	
28	<b>53 - LIGHTING FIXTURES</b>		A	S	1999												
29	Replace 50 Light Switches	3	A	S	1999	5	REP	1	ump sum	\$5,000	0	0	0	0	\$5,000		
30	Provide Occupancy Sensors	3	A	S	1999	5	REP	1	ump sum	\$13,000	0	0	0	0	\$13,000	In closets and bathrooms	
31																	
32	<b>54 - COMMUNICATIONS</b>	3	H	S	1999	5	REP	1	ump sum	\$155,000	0	0	0	0	\$155,000	Replace Public Address System & Security Upgrades Including Inter. Gym	
33																	
34	<b>61 - EXTERIOR WALLS/COLUMNS</b>		S	S													
35	Repair Selected Areas of Exterior Walls	3	A	S	2001	5	REP	2,500	SF	\$35	0	0	0	0	\$87,500	Seal air leaks	
36	Replace Deteriorated Metal Panels	3	A	S	2001	5	REP	80	SF	\$250	0	0	0	0	\$20,000	Including sealant replacement	
37	Recover EIFS System	3	A	S	2001	5	REP	1	ump sum	\$52,500	0	0	0	0	\$52,500	Including sealant replacement	
38																	
39	<b>68 - ROOFS</b>	3	S	S	2008	5	REP	35,850	SF	\$35	0	0	0	0	\$1,255,000	Replace portion of roof	
40																	
41	<b>72 - PLUMBING DRAINAGE</b>	3	H	S	1989	5	REP	1	ump sum	\$45,000	0	0	0	0	\$45,000	Replace Sanitary and Storm Cross Connection	
42																	
43	<b>72 - HOT WATER HEATERS</b>	3	H	S	1989	5	REP	1	ump sum	\$58,000	0	0	0	0	\$58,000	Replace Hot Water Heaters	

SAMPLE OF SYSTEMS DATA

# BCS Enhanced Services

## – Roof Inspection and Thermal Roof/Moisture Scan (MS, HS, IEC, PEC, CRC, MB)



All roofs on the Lewiston Porter Central School District were inspected and infrared scanned in June 2020 in coordination with Trautman Associates and the District. Approximately 422,000 square feet of roofing was inspected.

### Roof Core Construction

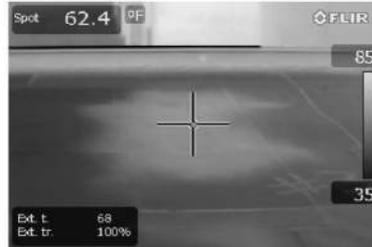
- Since all EPDM single ply membrane roofs are under existing warranties, no core samples were taken during the inspections.

### Inspection Findings

- Maintenance Building**
  - Overall condition: Good.
  - Roof Drain Strainers: Clean.
  - Ponding: None noted.
- Community Resource Center**
  - Overall condition: Fair-to-Good.
  - Roof Drain Strainers: Heavily clogged with debris and preventing drain.
    - Ponding: Caused by clogged roof drains.
  - Low flashing heights (6") along walls.
  - Several punctures/slices and one large seam failure noted in EPDM.
- Primary Education Center**
  - Overall condition: Fair-to-Good.
  - Roof Drain Strainers: Clogged with debris and preventing drainage.
    - Ponding: Caused by clogged roof drains.
  - Low heights at masonry through-wall flashings.
  - Two completely loose metal curb caps not attached to their rail curbs.
  - Extremely low vent pipes (3" above roof) noted.
  - Several punctures and one open EPDM seam noted.



HS, Wet Area #3 (66 Sq. Ft.) with puncture circled within wet area.



HS, Thermal image of Wet Area #3.



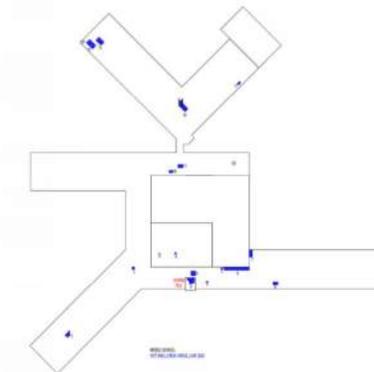
Debris pile of old scaffolding parts should be removed from the roof surf.



MS, Many drains were severely clogged on the Middle School roofs.

### Infrared Moisture Survey Findings

- Middle School**
  - 18 wet insulation areas located.
  - Total of 994 square feet wet insulation.
  - Punctures noted in wet areas 4, 12, 13, 16, 17.



# BCS Enhanced Services

## – Stage Rigging and Lighting Inspection (IEC & HS)

**SYRACUSE SCENERY & STAGE LIGHTING CO., INC.**

**STAGE RIGGING SYSTEMS SURVEY REPORT**  
**LEWISTON PORTER CENTRAL SCHOOL DISTRICT**  
**INTERMEDIATE EDUCATION CENTER**  
**YOUNGSTOWN, NEW YORK**  
**SURVEY DATE: 8/13/20**

**A. SITE SURVEY CRITERIA**

1. Qualifications of the inspector
  - a. The survey was conducted by Harold (Ike) Shippers in the design, installation, maintenance of theatrical rigging systems.
  - b. Ike Shippers is an ETCP-certified Stage Rigger
2. General survey scope
  - a. Moving or static rigging systems used to move luminaries and other related equipment.
  - b. Stage track systems
  - c. Stage curtains
  - d. Survey is conducted from the stage floor. No structural or architectural rigging was observed.
  - e. The suitability of the buildings to properly handle loads imposed by the rigging systems is beyond the scope of this report.
3. Systems survey scope
  - a. System hardware was observed for suitability.
  - b. Moveable rigging systems were operated throughout the available range of travel and functionality.
  - c. Tracks were observed to determine their suitability for use and functionality.
  - d. Stage curtains were observed for overall condition indicating up to date flame retardancy information.

**B. LEWISTON PORTER INTERMEDIATE EDUCATION CENTER**

1. GENERAL SYSTEM INFORMATION
  - a. The approximate date of the original installation is 2010.
  - b. The rigging system includes 2 static hung sets
  - c. Static hung system information
    - 1) Batten length: 34'-6" main valance batten
    - 2) Batten attachment: batten is suspended with 7' attachment spacing
    - 3) Attachment spacing: 7'
    - 4) Number of batten attachments: 5 on valance

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101 Monarch Drive Liverpool, NY 13088-4514  
 p: 315-453-8096, 800-453-7775 f: 315-453-7897  
 e: ishippers@syracusecenery.com

**SYRACUSE SCENERY & STAGE LIGHTING CO., INC.**

- 5) Batten size: 1-1/4" schedule 40 batten
- 6) Batten splicing: pipe coupler
- d. Manual counterweight system information
  - 1) Guide type: wire guide
  - 2) Lift lines per set: 4
  - 3) Set centers: 6'
  - 4) Cable type: 3/8" 6x7 improved glow wire
  - 5) Cable fittings: malleable cable installed by pipe coupler
  - 6) Batten size and splices: 1-1/4" schedule 40
  - 7) Batten attachment: clove hitch with twist
  - 8) Batten attachment spacing: 7', 14', 7'
  - 9) Handline type: 5/8" Manila
  - 10) Head block orientation: underhung with 11"
  - 11) Loft block orientation: underhung
  - 12) Number of locking rails: 2 locking rail
  - 13) Locking rail rope lock spacing: 6"
  - 14) Rope lock type: short handle
  - 15) Counterweight size: 4"

**2. OVERALL EVALUATION:**

- a. System is in very poor condition.
- b. The static hung system is suspended with jack suspension. The jack chain should be replaced.
- c. Battens use pipe couplers to splice pipes together used. Internal batten sleeving should be used entire length of the batten.
- d. Head block sheave is an uneven pitched sheave head block sheave.
- e. Operating and warning signage is missing.
- f. Maintenance and service log was not available.
- g. Battens are missing batten end caps. These are end of the pipe batten to give a visual signal on a softer surface to come into contact with the batten.
- h. The cable and cable fittings in the system is used.
- i. Loft blocks and head blocks have no bearings: wearing out and making noise.
- j. More investigation is needed to see about and increase the number of pickup points on the batten below the center beam that may need to be replaced.

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**SYRACUSE SCENERY & STAGE LIGHTING CO., INC.**

- k. Stage curtains have reached their serviceable life and serious consideration should be given to replace the curtains.
- l. Handline in the curtain tracks needs to be replaced. The current handline is manila that has become dry rotted and is giving off splinters while being used.
- m. Counterweight arbors have cast iron tops and loose nuts on the arbor rods. These arbors should be replaced.
- n. Floor blocks in the counterweight system have bushing rather than bearing and are making noise during operation.
- o. Rope locks are very worn and some do not function.
- p. The locking rail is constructed with nuts and bolts that have become loose over time. A new locking rail should be installed with welded connections.
- q. The school district should ensure that all of the personnel who operate the counterweight rigging systems have been trained for its use.

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# Top Findings at Each Building

- Middle School
- Intermediate Education Center
- Primary Education Center
- High School
- Community Resource Center
- Maintenance Building



2017 CIP  
*HS Guidance Offices & Running Track*

# Middle School

- Parking Lot, Roadways, and Sidewalk Reconstruction - \$792k
- Exterior and Interior Door Replacements - \$805k
- Window Replacements - \$1.84m
- Boiler and Steam Piping Replacement - \$363k
- Unit Ventilator & RTU Replacement - \$2.44m
- Mechanical Cooling/AC System - \$185k
- Steam Piping Replacement - \$1.65m
- HVAC Control Upgrades - \$660k
- Kitchen Upgrades - \$1.06m
- Crawlspace Ventilation - \$80k



# Intermediate Education Center

- Parking Lot and Sidewalk Reconstruction - \$1.75m
- Interior Door Replacements - \$354k
- Boiler Replacement - \$330k
- AHU & RTU Replacement - \$528k
- Split System Replacement - \$66k
- Steam Condensate Piping Replacement - \$1.45m
- Radiator and Convector Replacement - \$528k
- HVAC Control Upgrades - \$488k
- Phone & PA System Upgrade - \$179k
- Boys and Girls Locker Rooms - \$1.58m
- Kitchen Upgrades - \$1.06m
- Crawlspace Ventilation - \$80k



# Primary Education Center

- Parking Lot, Roadways, and Sidewalk Reconstruction - \$528k
- Masonry Wall and Foundation Repairs - \$607k
- Window Replacements - \$1.76m
- Interior Door Replacements - \$449k
- Boiler Replacement - \$264k
- Water and Sanitary Piping Replacements - \$290k
- Phone & PA System Upgrade - \$179k
- Boys and Girls Locker Rooms - \$868k
- Kitchen Upgrades - \$924k
- Crawlspace Ventilation - \$132k



# High School

- **Athletic Field Lighting Replacement - \$1.45m**
- **Parking Lot, Roadways, and Sidewalk Reconstruction - \$3.07m**
- **Synthetic Turf Replacement - \$750k**
- **Masonry Wall Repairs - \$430k**
- **VCT Replacement in A-Wing - \$231k**
- **HC Access to Seating in Pool - \$330k**
- **Heat Exchange Replacement - \$132k**
- **Plumbing Fixture Replacements - \$495k**
- **Kitchen Upgrades - \$1.06m**
- **Crawlspace Ventilation - \$158k**



# Community Resource Center

- Parking Lot & Roadways Reconstruction - \$726k
- Gym AHU & Exhaust Fan Replacement - \$158k
- Cooling / AC - \$142k
- HVAC Control Upgrades - \$66k
- Analog Phone System Upgrade - \$26k



# Maintenance Building

- Parking Lot & Roadways Reconstruction - \$475k



# Police Building

- Fire Alarm Replacement - \$60k
- Roof Replacement - \$175k
- RTU Replacement - \$75k





# Questions?



*2017 CIP  
High School - Commons Area*