

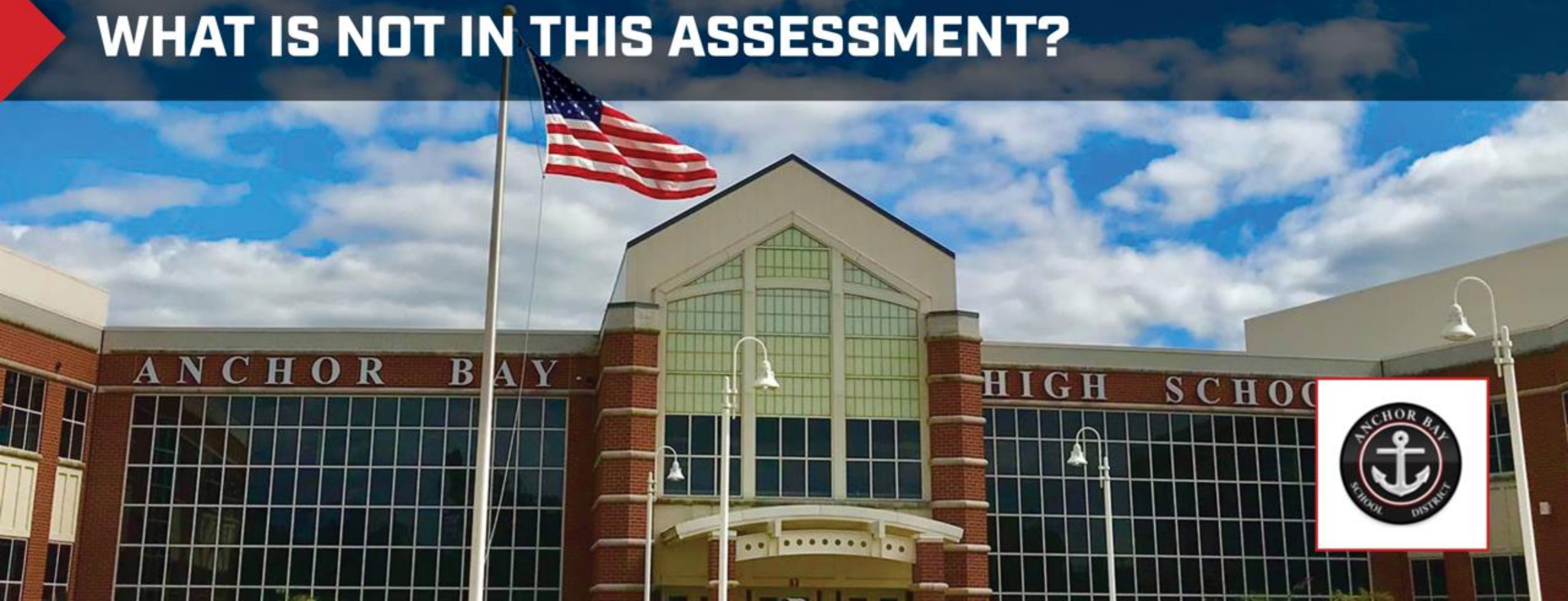
Phase I: Infrastructure Assessment

February 23, 2022

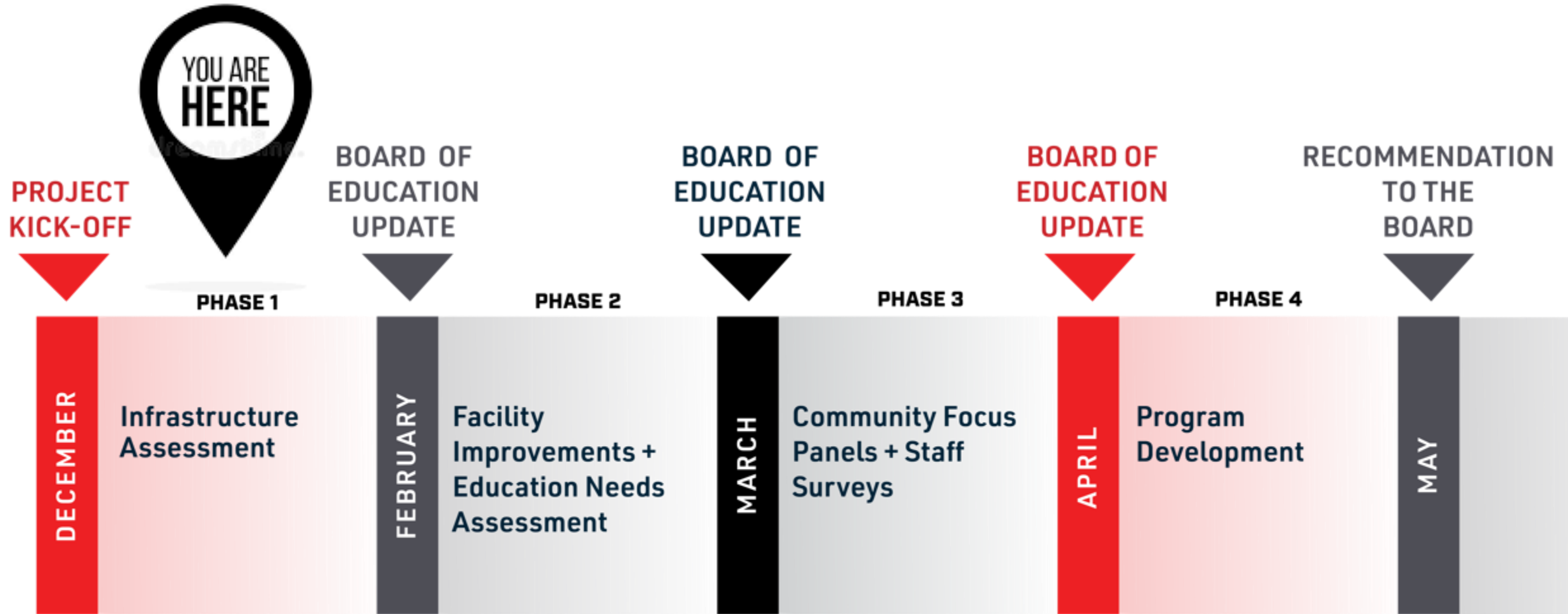


WHAT IS IN THE INFRASTRUCTURE ASSESSMENT?

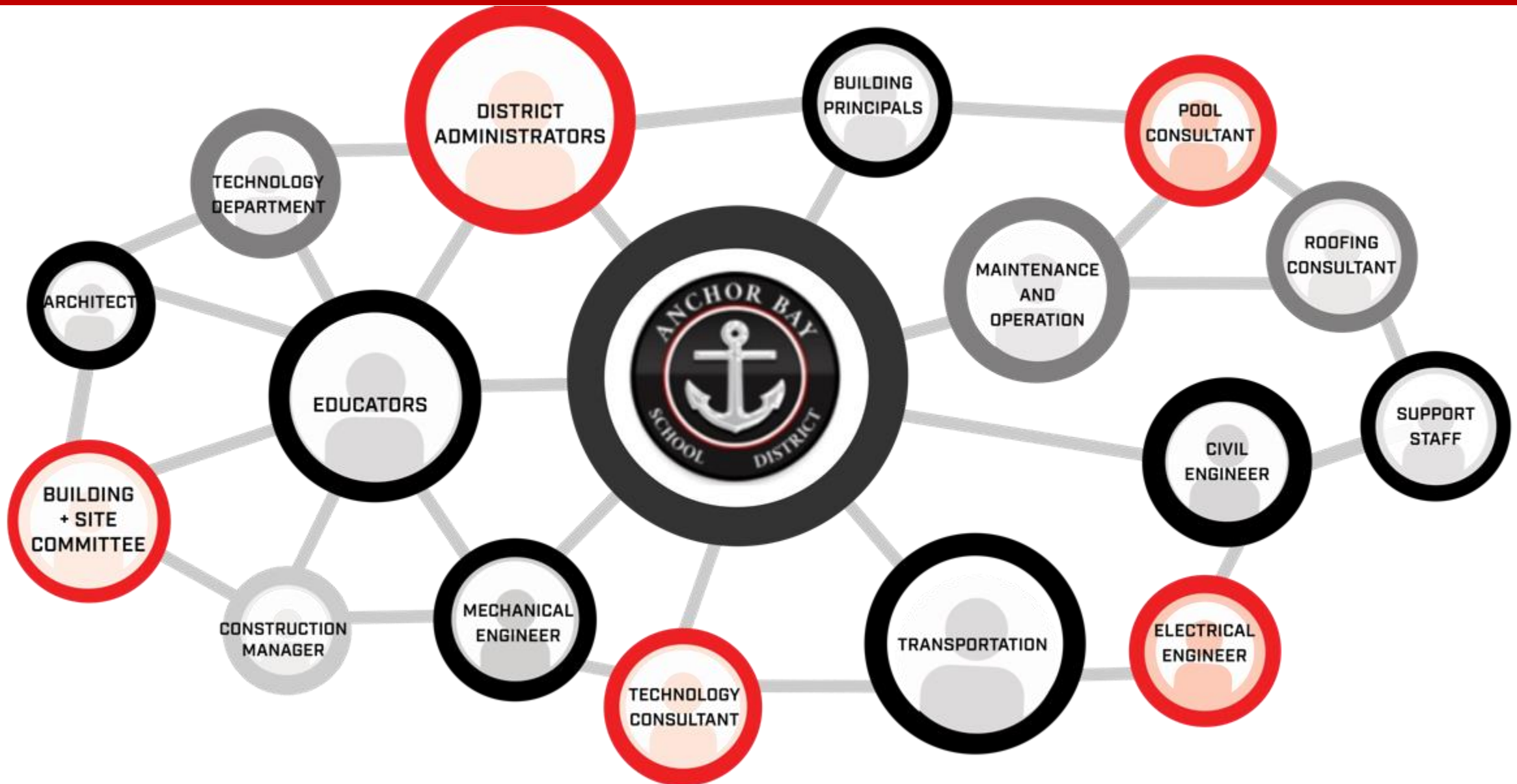
WHAT IS NOT IN THIS ASSESSMENT?



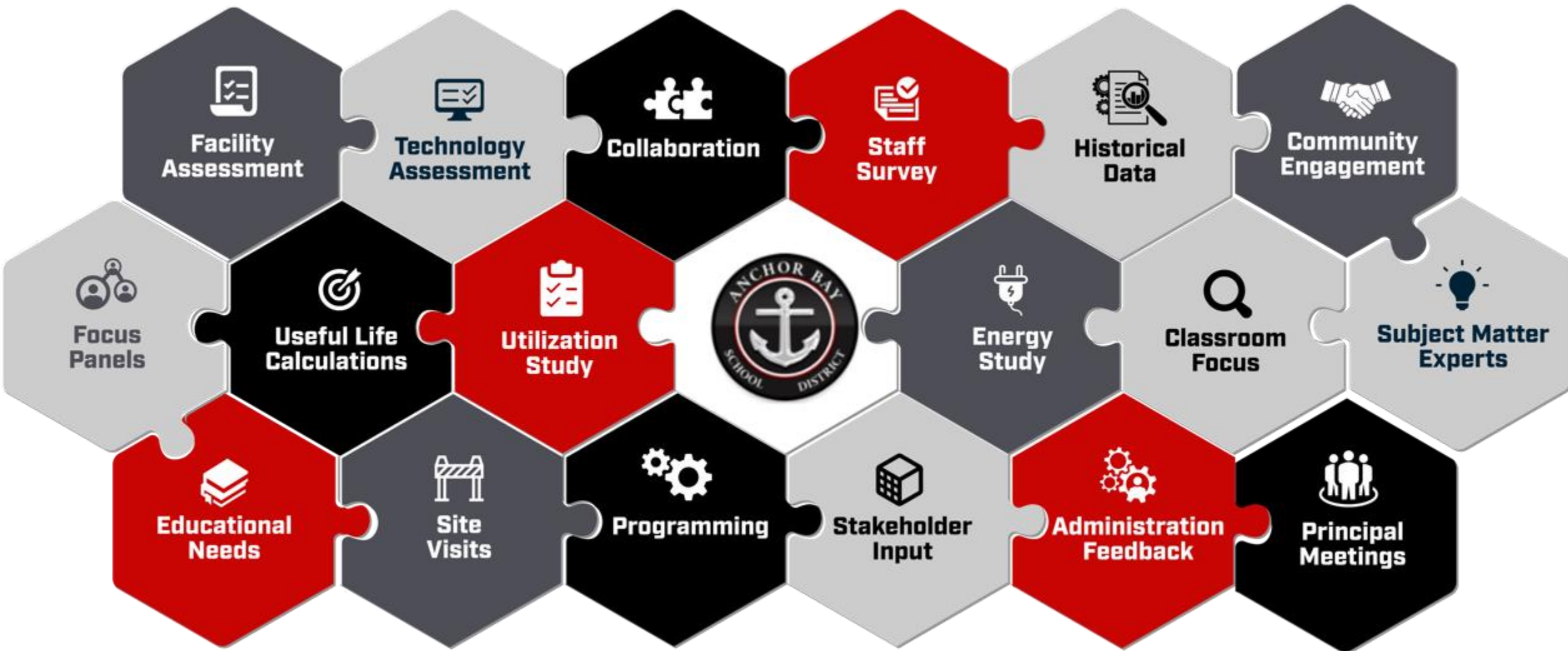
WHAT IS THE TIMELINE?



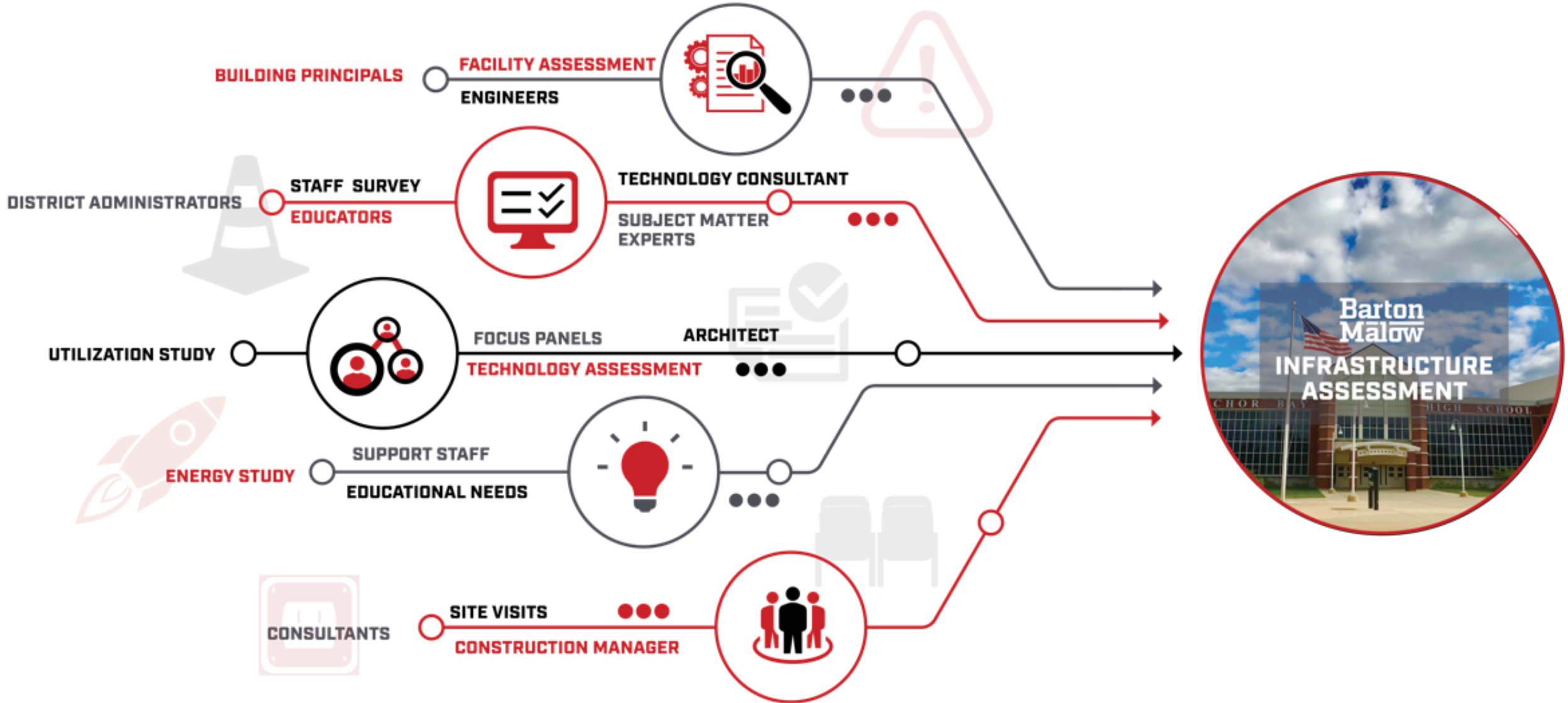
WHO IS PARTICIPATING?



WHAT IS THE PROCESS?



WHAT IS OUR PURPOSE?



BACKGROUND INFORMATION

✓ 1996 Bond Issue: **\$31.2M**

✓ 2003 Bond Issue: **\$42.2M**

✓ 1999 Bond Issue: **\$114.7M**

✓ 2017 Bond Issue: **\$22.6M**

TOTAL: \$210.7M

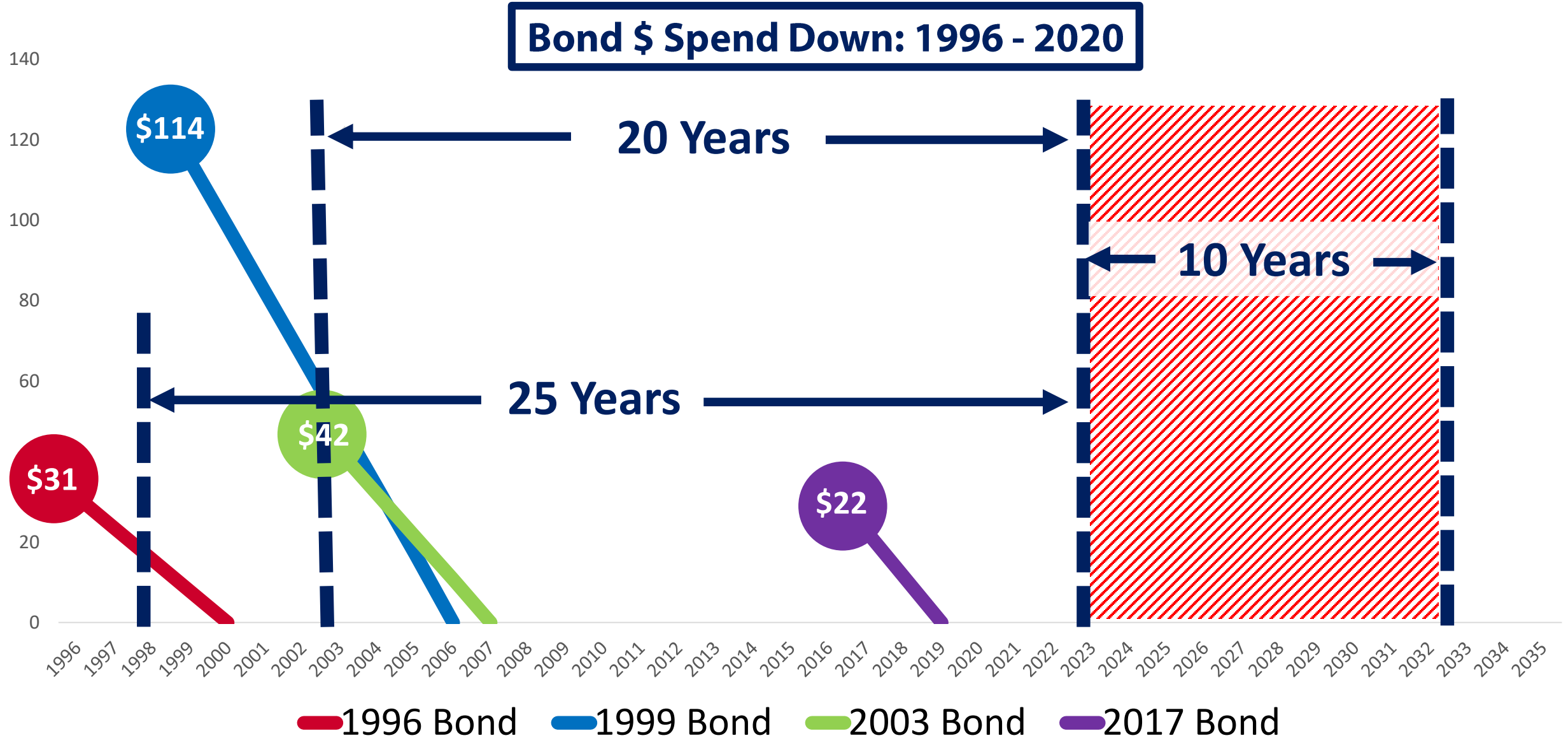
\$2.6M/year *in capital improvement projects*

\$189K/facility *in annual improvement projects*

\$2.02/square foot *in annual improvement projects*

Total commitments over the last 20 years

BACKGROUND INFORMATION



Facility Assessment Findings



OVERVIEW OF FINDINGS

- ✓ Buildings and grounds are, overall, in fairly good condition
- ✓ Many key infrastructure components are nearing the end or past their useful life
- ✓ Investments will be needed to extend the useful life of the facilities
- ✓ Technology has not been a primary focus of recent bond programs

CATEGORIES



1. Critical Needs (1-3 years)



2. Safety & Security



3. Near Needs (4-7 years)



4. Energy Savings



5. Future Needs (8-10 years)



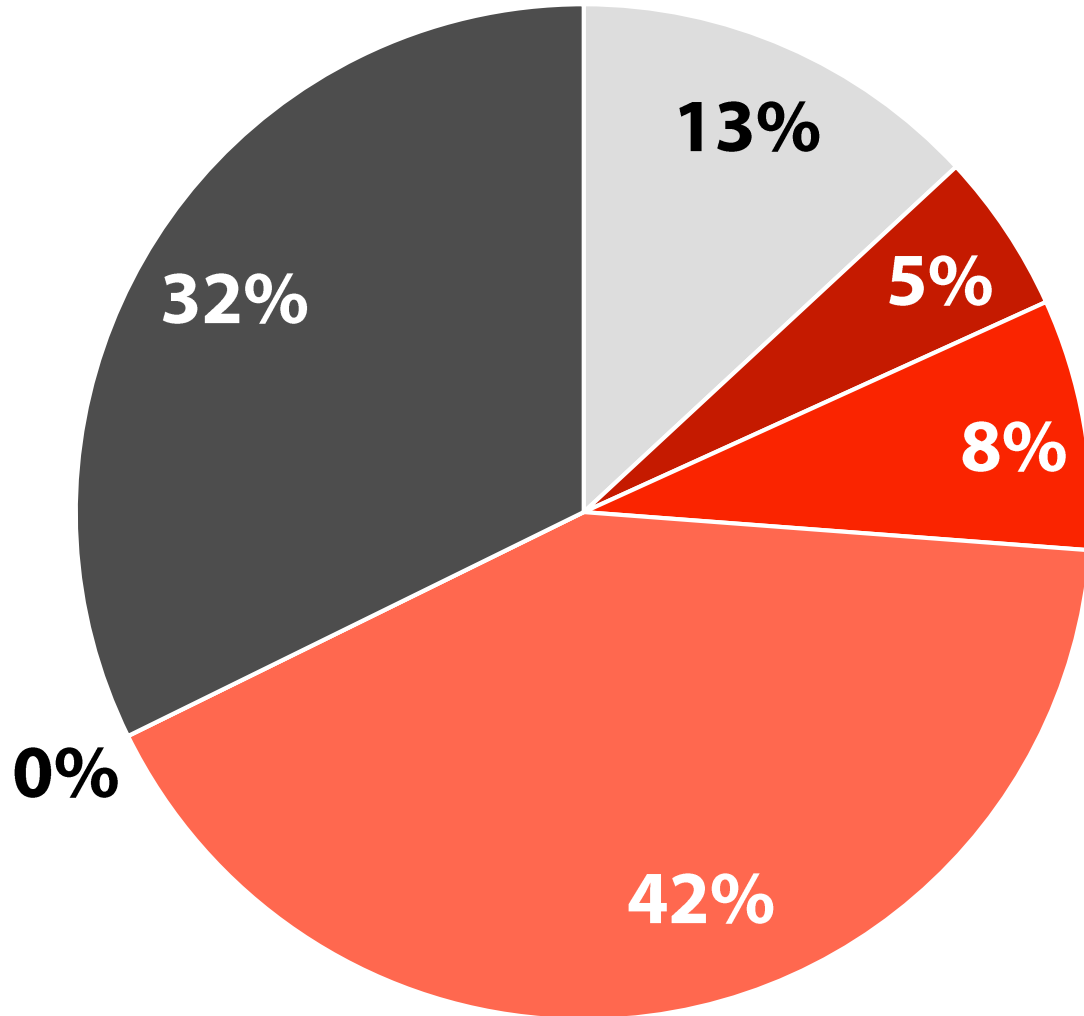
6. Fixtures, Furniture and Equipment

Critical Needs:

Projects necessary over the next 1-3 years for the proper functioning of the building components and systems and to maintain the integrity of the existing structures.

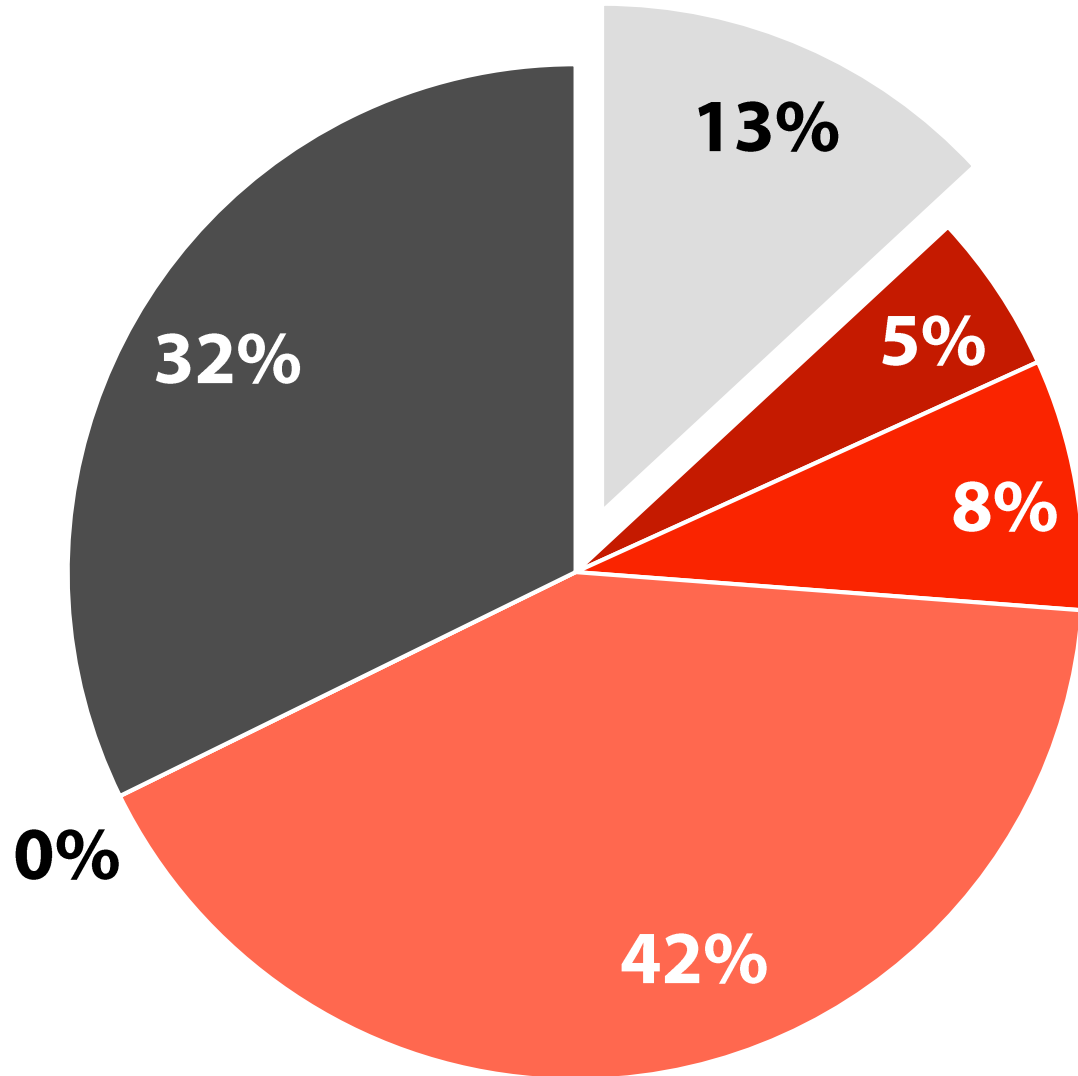


CRITICAL NEEDS - \$31.3M



- Roof Replacement - \$4.1M
- Building Envelope - \$1.6M
- Architectural Improvements - \$2.5M
- Mechanical Systems - \$13.0M
- Electrical Systems - \$0M
- Site Paving - \$10.1M

ROOF REPLACEMENT - \$4.1M

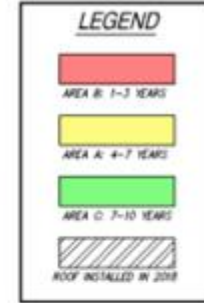


District has nearly 1.2M sf in roofing and must complete 40,000 sf of replacement annually to maintain a 25-year replacement cycle

Replace roofing systems rated "poor" per District's roofing consultant

Critical Needs (1-3 years) – \$31.3M

ROOF REPLACEMENT - \$4.1M



- ✓ Roof Consultant Analysis
- ✓ Graded based on age and condition
- ✓ 158,000 sf of roofing scheduled for replacement over the next 3 years
- ✓ 2017 bond investment included approx. 250,000 sf of roof replacement

DRAWN BY: C. GAWNE
CHECKED BY: J.D'ANNUNZIO
PROJECT MANAGER: J.D'ANNUNZIO

DATE: 02/10/2022
DATE: 02/10/2022
BD PLAN DATE:

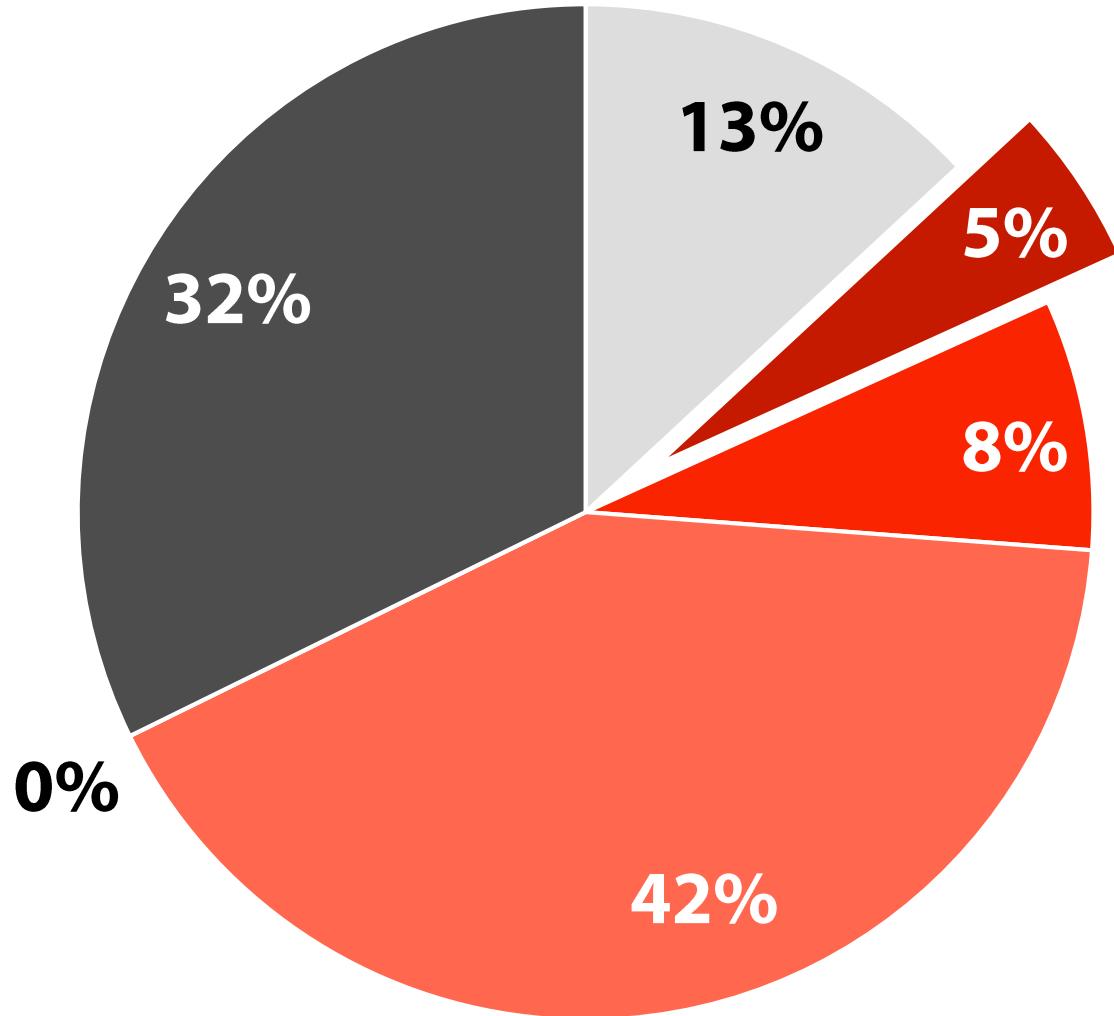
SPALDING DeDECKER
Engineers | Surveyors
905 South Blvd. East
Rochester Hills, MI 48307
Phone: (248) 844-5400
Fax: (248) 844-5440
www.sda-eng.com

ANCHOR BAY SCHOOL DISTRICT
2022 BOND PLANNING
LIGHTHOUSE ELEMENTARY SCHOOL
PROPOSED ROOFING WORK

JOB No. PR22011
SCALE: NONE
DRAWING No. SHEET ROOFING-1



BUILDING ENVELOPE - \$1.6M



Projects designed to extend the useful life of the facility, prevent water infiltration, deterioration and potential energy savings

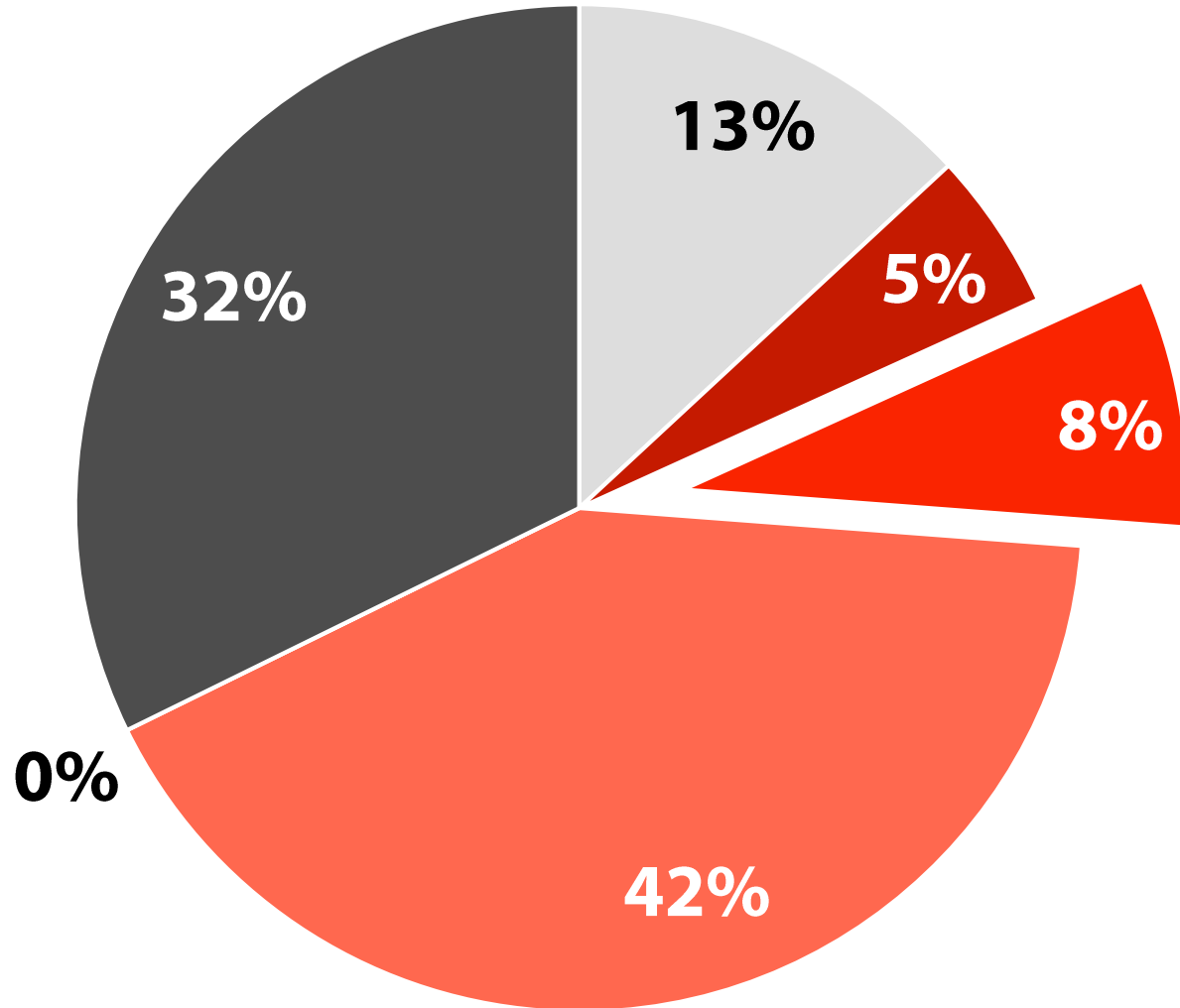
Includes replacement of exterior window systems, metal siding and fascia systems and masonry restoration projects.

Critical Needs (1-3 years) – \$31.3M

BUILDING ENVELOPE - \$1.6M



ARCHITECTURAL IMPROVEMENTS - \$2.5M



Includes critical flooring replacement projects, restroom renovations, minor casework replacement and miscellaneous building architectural components

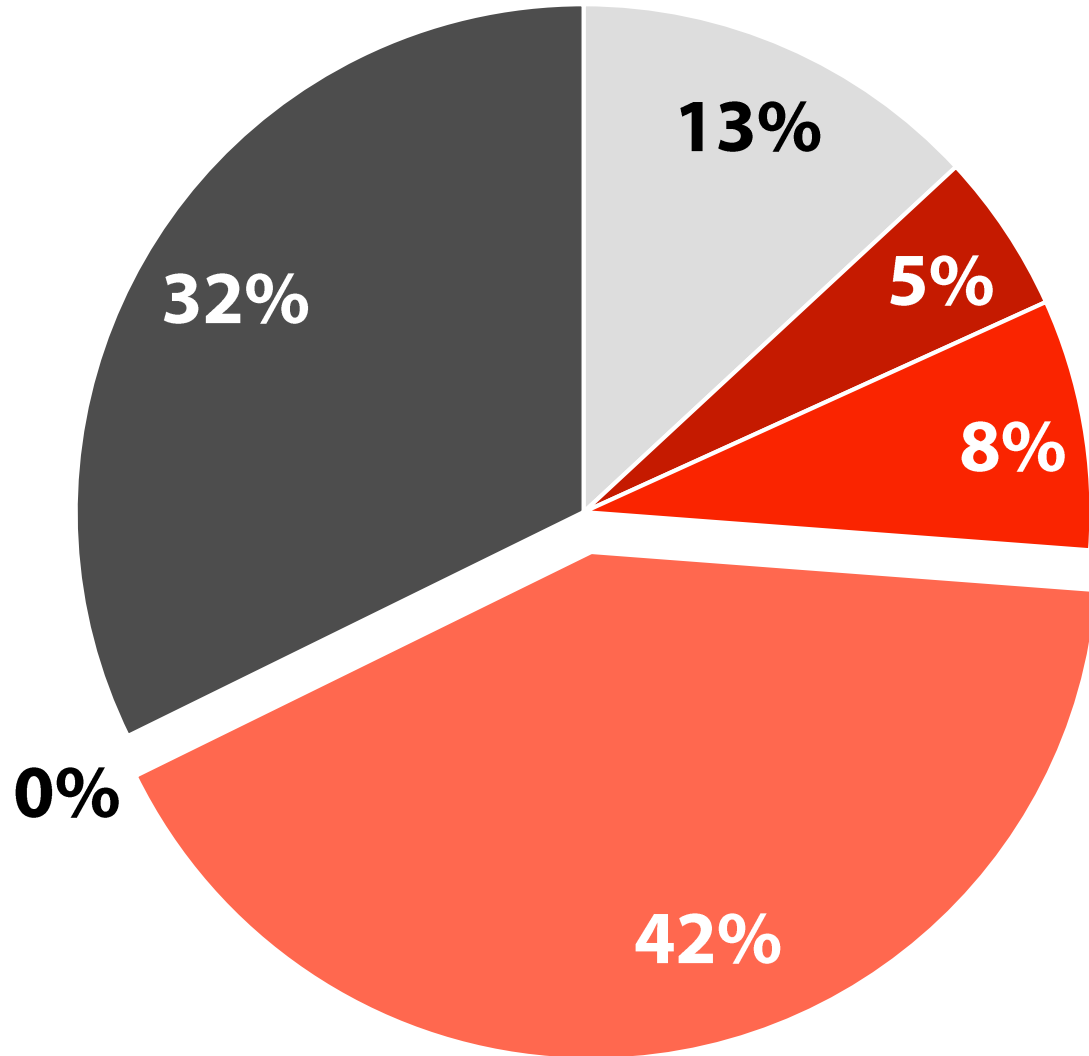
Critical Needs (1-3 years) – \$31.3M

ARCHITECTURAL IMPROVEMENTS - \$2.5M



- ✓ **Original Restroom Facilities**
- ✓ **20+ Year Old Flooring Systems**
- ✓ **Damaged Casework**

MECHANICAL SYSTEMS - \$13M



Majority of mechanical equipment is currently 17 to 27 years old

Replacement of HVAC Equipment beyond useful life calculation, engineering consultant evaluation and Maintenance and Operations Department recommendations

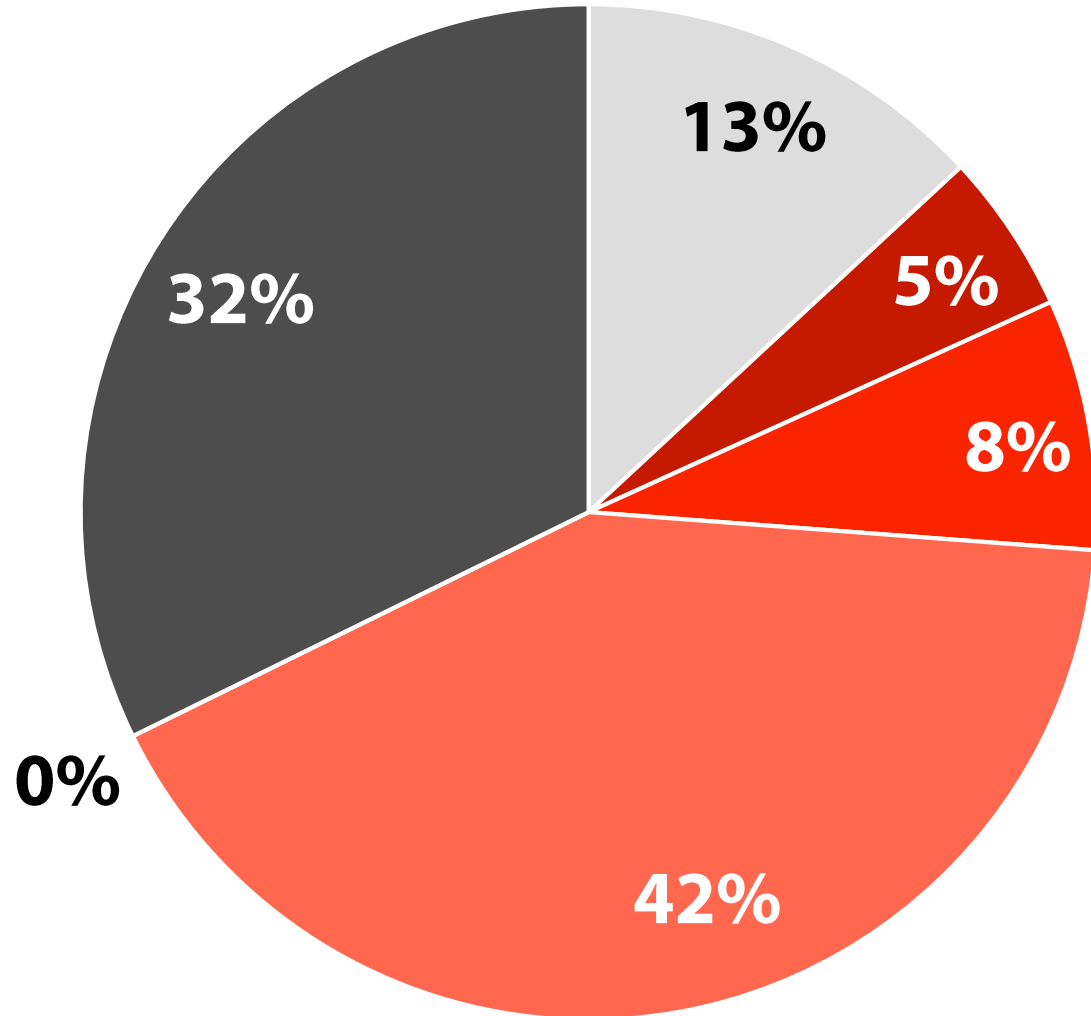
Critical Needs (1-3 years) – \$31.3M

MECHANICAL SYSTEMS - \$13M



- ✓ 17 to 27 years old equipment
- ✓ Over 275 pieces of HVAC Equipment
- ✓ Update plumbing systems
- ✓ District wide building management system

ELECTRICAL SYSTEMS - \$0M



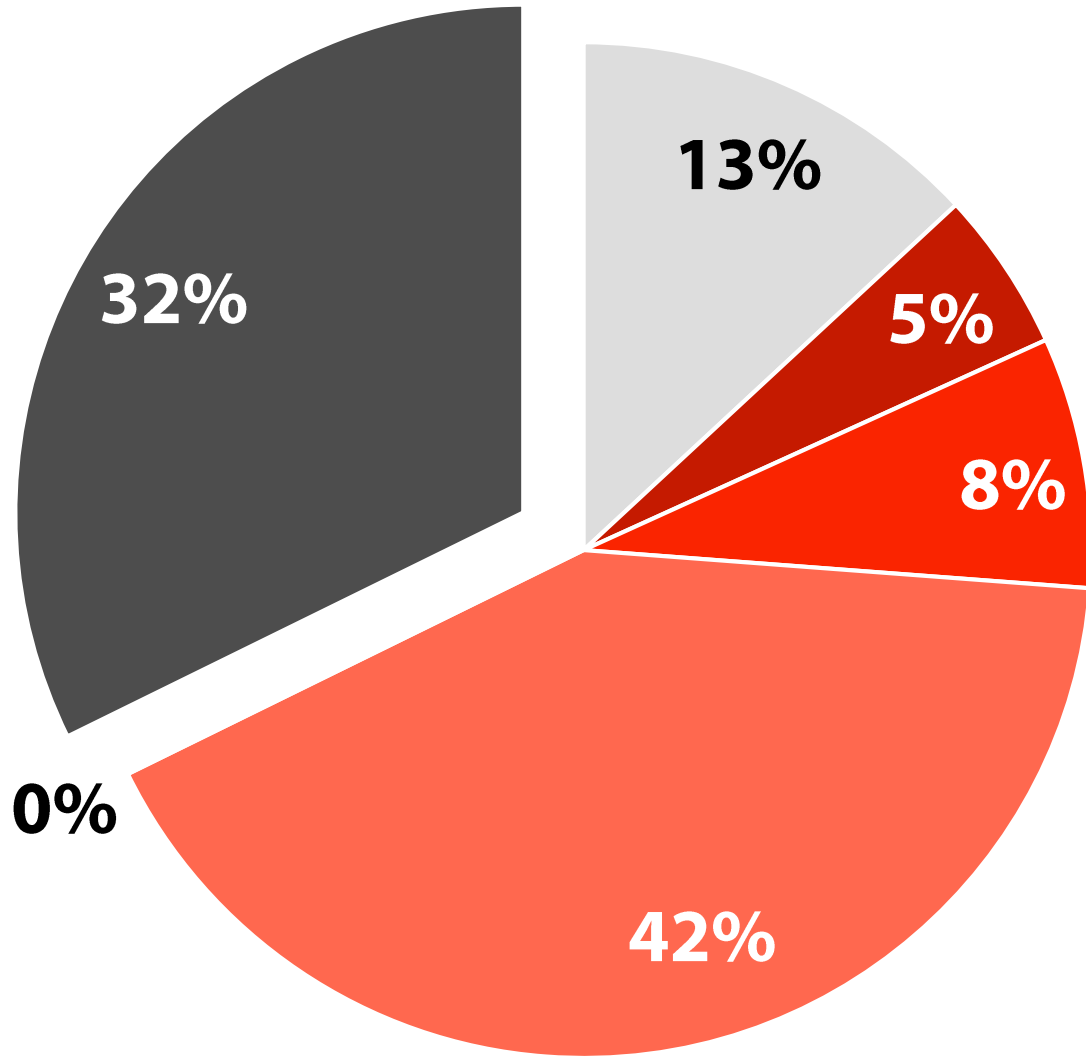
Useful life of electrical systems are longer than other systems

The District electrical systems are good condition

LED lighting upgrades should be considered

Critical Needs (1-3 years) – \$31.3M

ASPHALT AND CONCRETE REPLACEMENT - \$10.1M

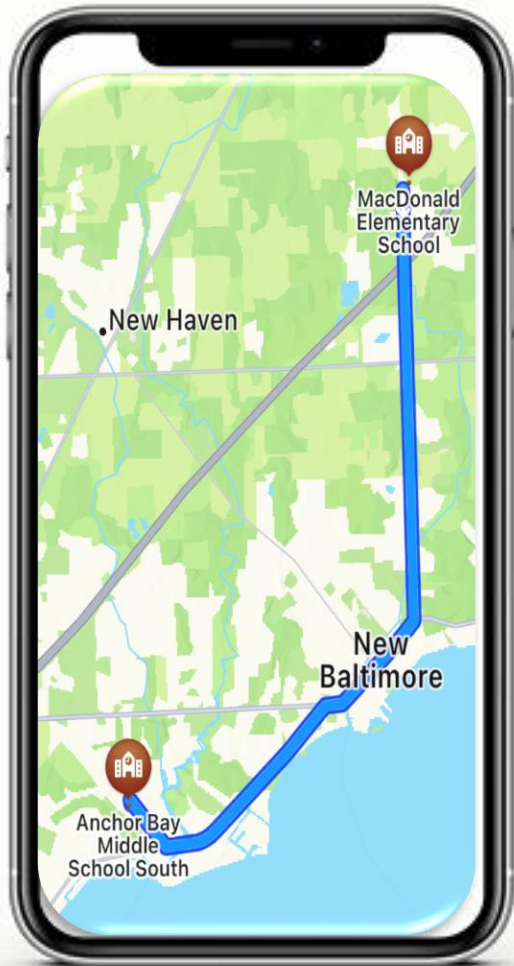


1.7M sf in asphalt paving and site concrete district wide, 420K annually to maintain a 20-year life cycle

Includes isolated concrete replacement, storm structure repairs, correction of drainage issues and replacement of key paved areas

Critical Needs (1-3 years) – \$31.3M

ASPHALT AND CONCRETE REPLACEMENT



ANCHOR BAY SCHOOL DISTRICT MAINTAINS NEARLY

1,700,000

SQUARE FEET

OF ASPHALT AND CONCRETE

THAT IS **MORE** SURFACE AREA
THAN

**ALL THE PAVEMENT FROM
MACDONALD ELEMENTARY
TO MIDDLE SCHOOL SOUTH**

13 MILES OF TWO-LANE HIGHWAY!

ASPHALT AND CONCRETE REPLACEMENTS - \$10.1M



- ✓ **Civil Engineer Analysis**
- ✓ **Graded Based on Age and Condition**
- ✓ **Mill and Overlay, Salvage Existing Base, Reconstruct**
- ✓ **Concrete Walkways and Curb Repairs**

Safety + Security:

Technology systems to control and monitor access, expand communication, improve emergency response time, enhance visibility and support incident management



SAFETY AND SECURITY - \$11.5M



BUILDING INFRASTRUCTURE - **\$7.6M**

VIDEO SURVEILLANCE - **\$1.2M**

ACCESS CONTROL - **\$1.1M**

EMERGENCY ALERT - **\$500K**

PUBLIC ADDRESS SYSTEM - **\$1.1M**

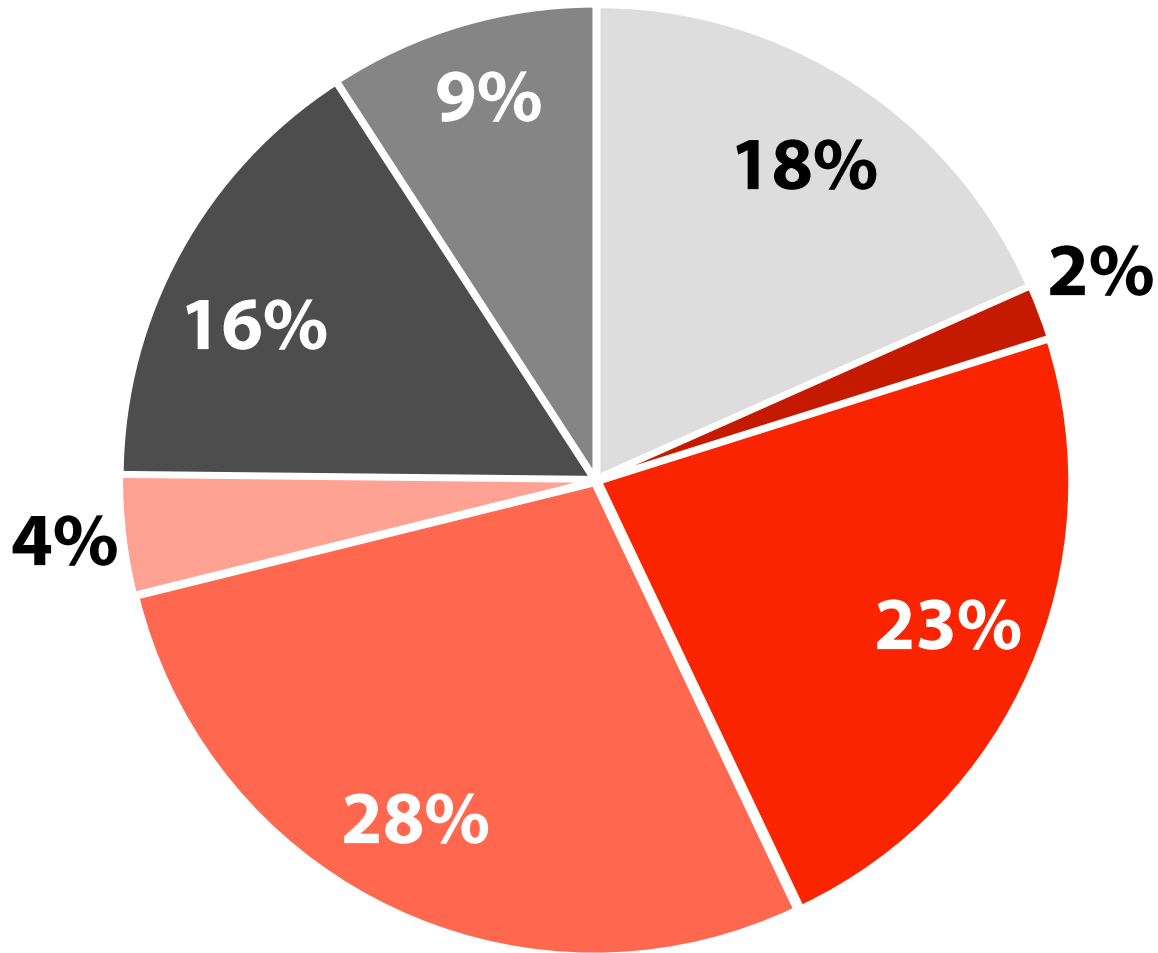


Near Needs:

Projects necessary in the next 4-6 years for the proper functioning of the building components and systems and replacement of building materials at the end of their useful life

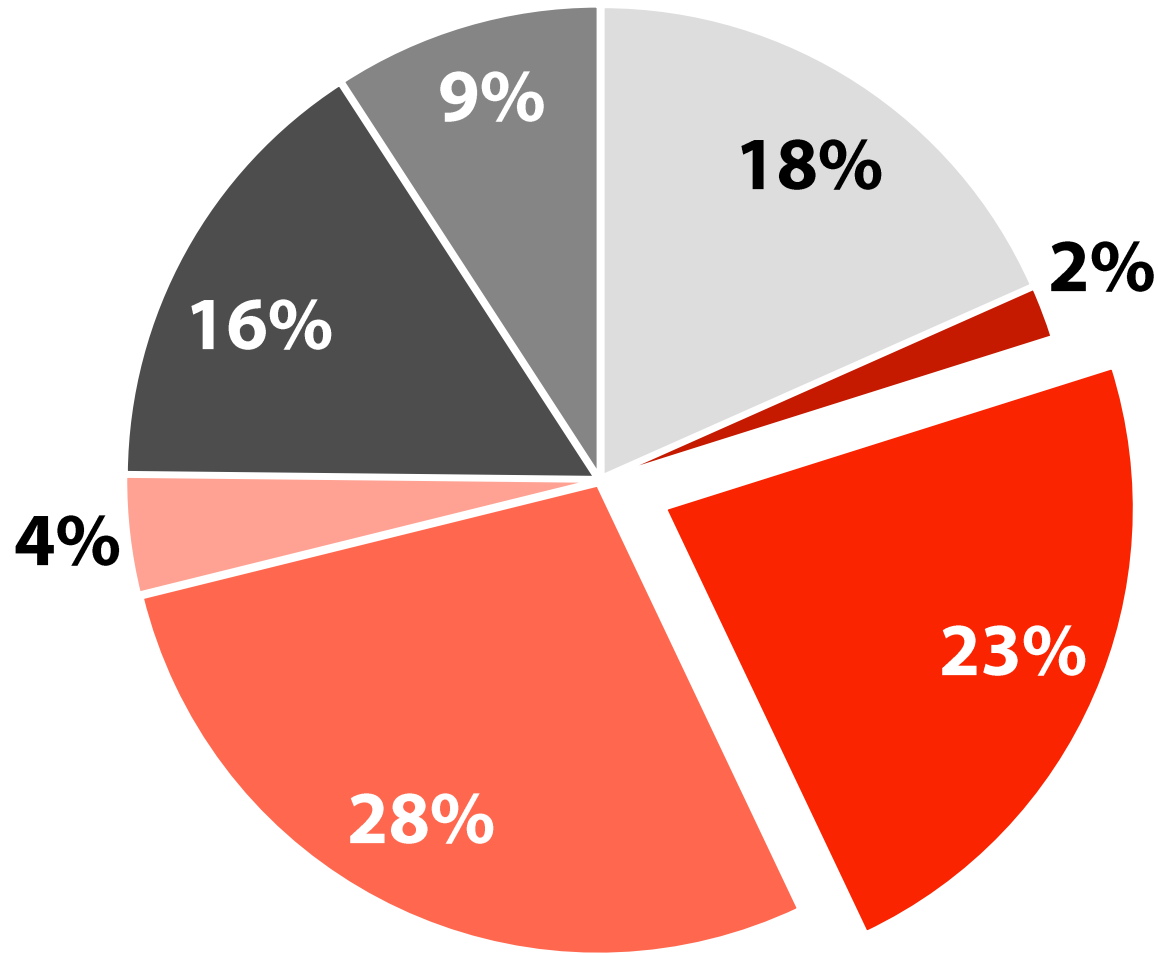


NEAR NEEDS (4-6 years) - \$44.5M



- Roof Replacement - \$8.2M
- Building Envelope - \$800K
- Architectural Improvements - \$10.2M
- Mechanical Systems - \$12.6M
- Electrical Systems - \$1.8M
- Site Paving - \$7M
- Technology Infrastructure - \$4.1

ARCHITECTURAL IMPROVEMENTS - \$10.2M

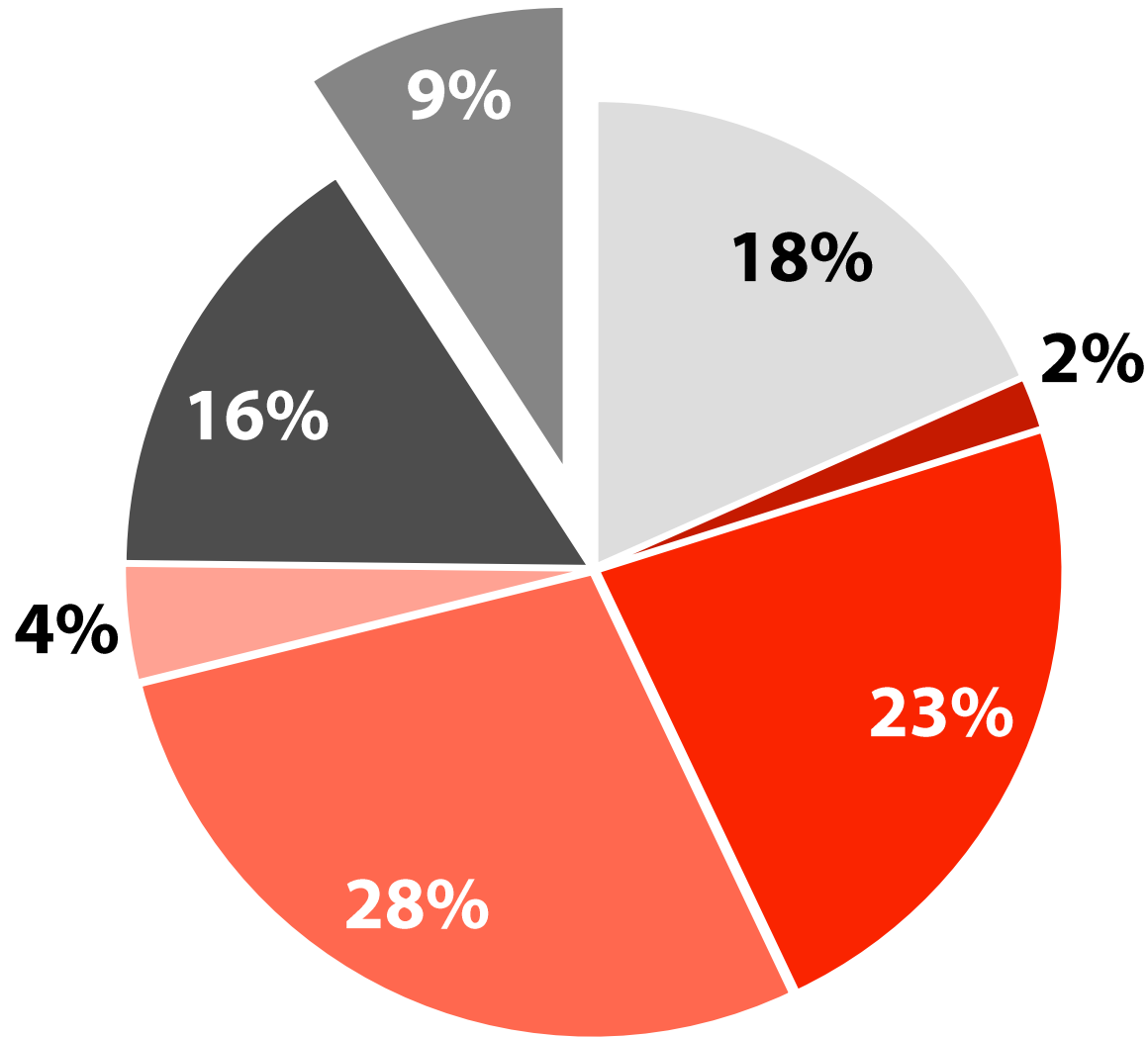


Includes critical flooring replacement projects, restroom renovations, casework replacement, and miscellaneous building architectural components

All District facilities will be 25+ years old and range from 25 to 72 years old

Near Needs (4-6 years) – \$44.5M

TECHNOLOGY INFRASTRUCTURE - \$4.1M



Existing cabling originally installed in the late 90's

Estimated over 3,400 drops and 129 miles of cabling district wide

Replacement of existing technology infrastructure, cabling, switches, phone systems and clocks

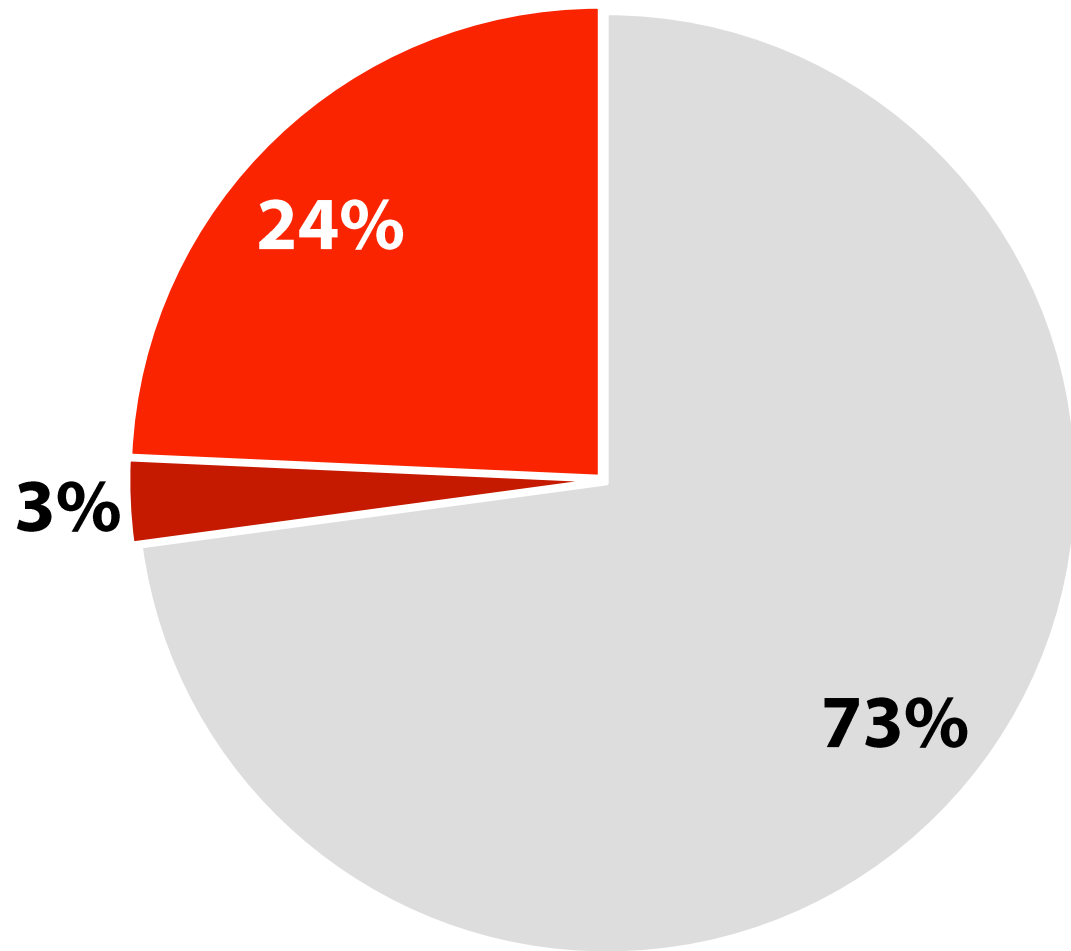
Near Needs (4-6 years) – \$44.5M

Future Needs:

Roofing, paving and building envelope projects required in the next 7-10 years to extend the useful life of the District's buildings and grounds

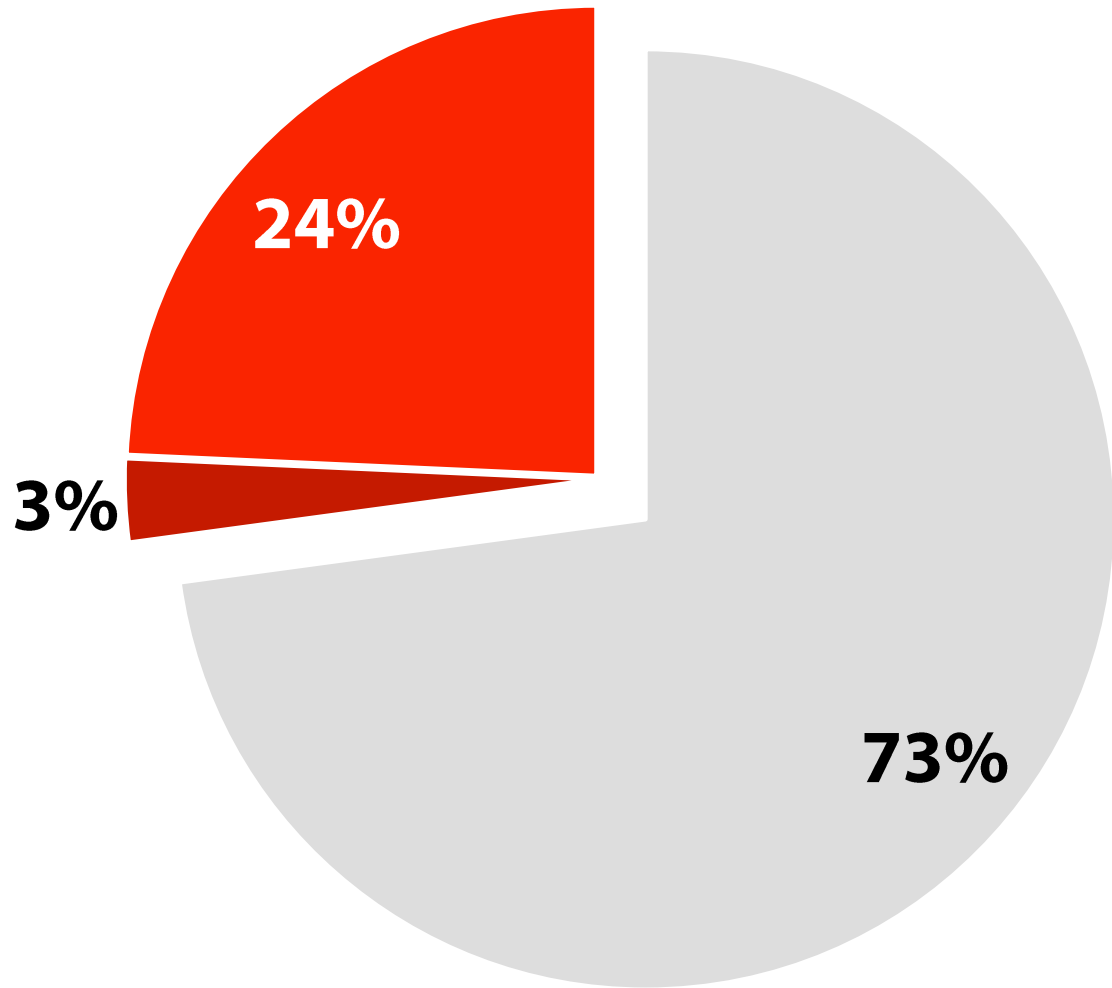


FUTURE NEEDS (7-10 years) - \$14M



- Roof Replacement - \$10.2M
- Building Envelope - \$400K
- Site Paving - \$3.4M

ROOF REPLACEMENT - \$10.2M



The District has nearly 1.2 million square feet in roofing

Over 75% of the District's roofing was installed/replaced during the 1996, 1999 and 2003 bond programs

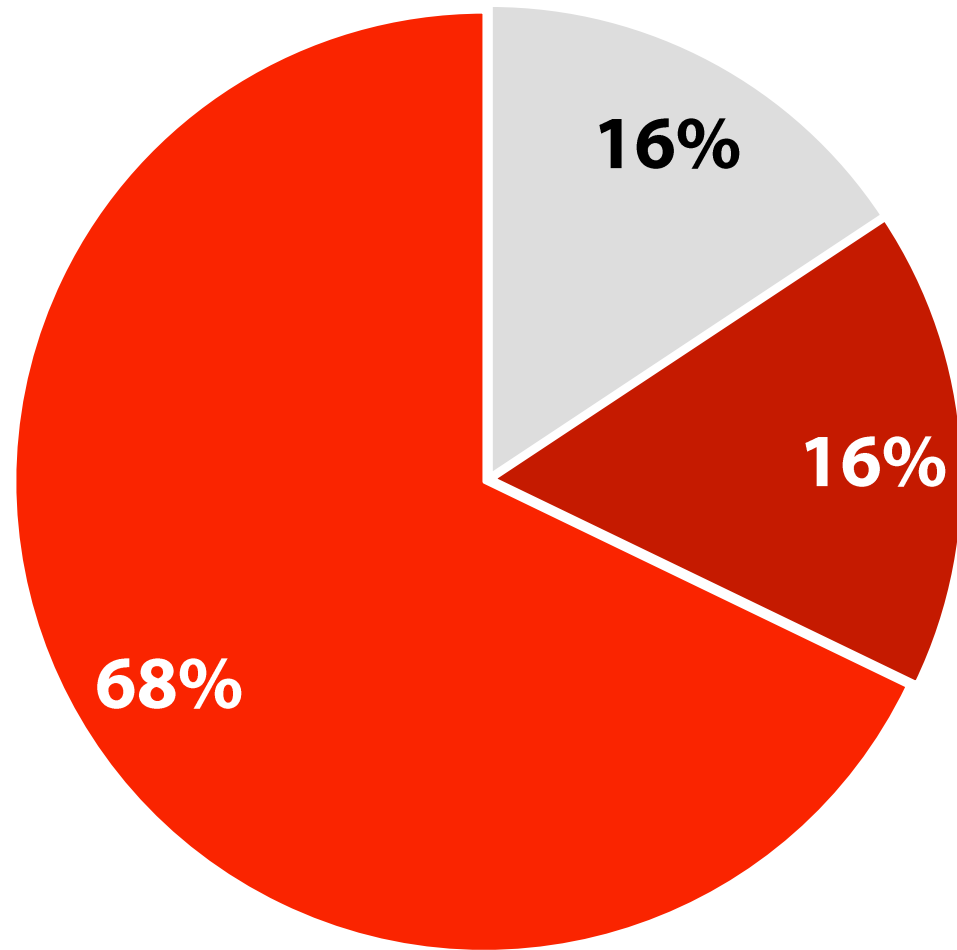
Future Needs (7-10 years) – \$14M

Energy Savings:

Projects that improve overall building function as well as reduce District energy costs

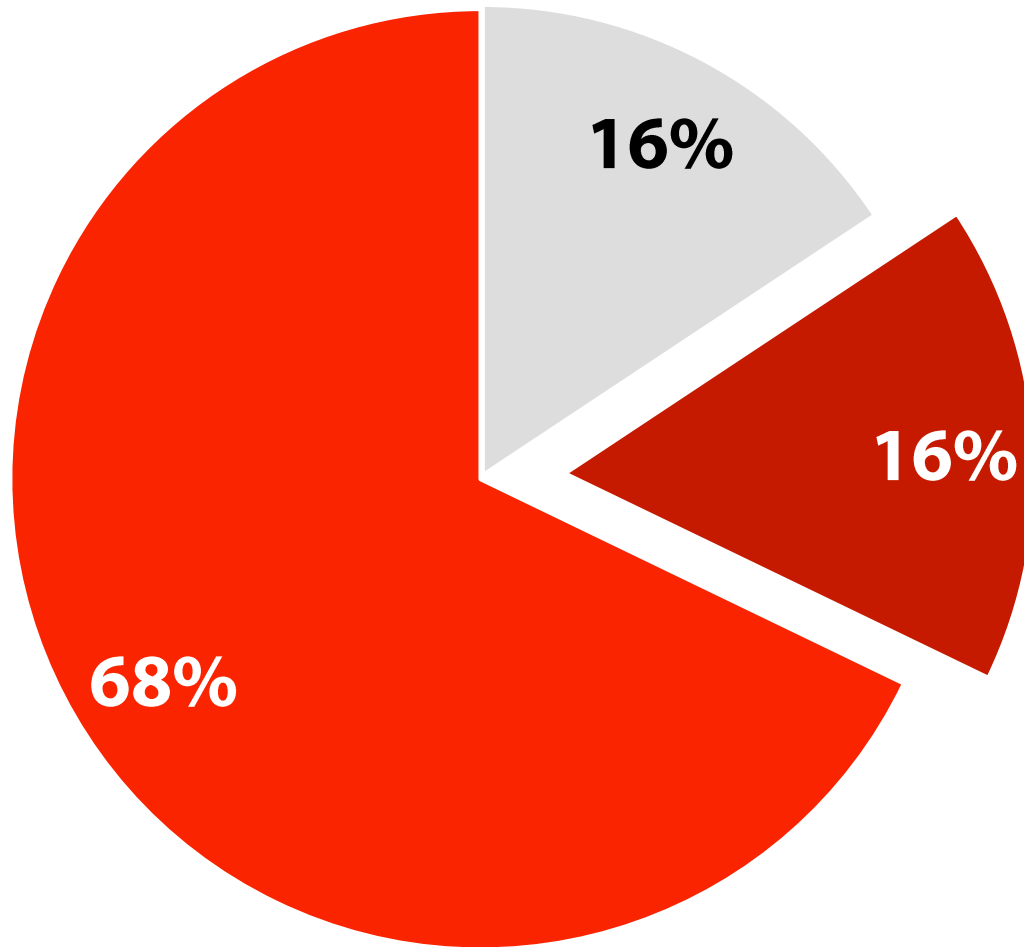


ENERGY SAVINGS - \$25.5M



- Window Replacement - \$4M
- Temperature Controls - \$4.2M
- Light Fixture Replacement - \$17.3M

TEMPERATURE CONTROLS - \$4.2M



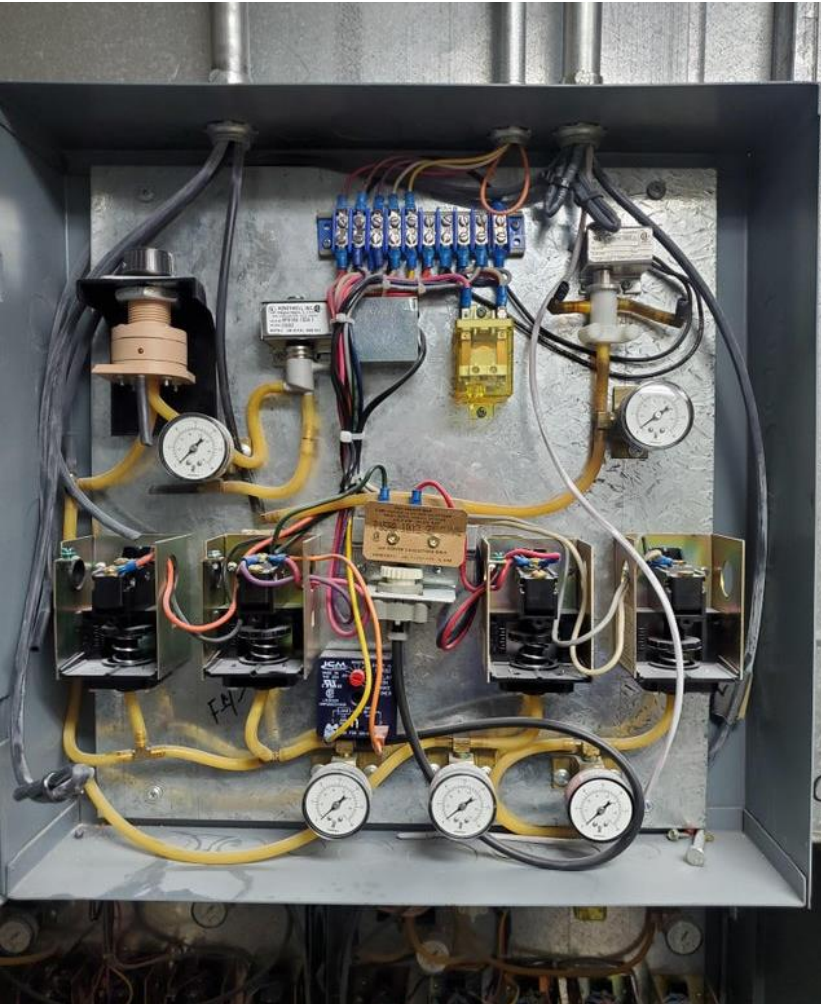
Existing systems use antiquated technology and are no longer supported

District investments in the 2017 bond have been successful

Replacement of existing control systems and replace with new DDC (direct digital control) system

Energy Savings – \$25.5M

TEMPERATURE CONTROLS - \$4.2M



1950's

CONTROL PAK
International

Manufacturers of the most reliable, and versatile Building Automation Systems since 1976

Controllers
Advisor Support
International

The EM Solution™ Series Controllers, Host Software, Peripherals and Sensors for Any Application

INTERNATIONAL
Suite #100
-2800
-2880
trolpak.com
Newsletter

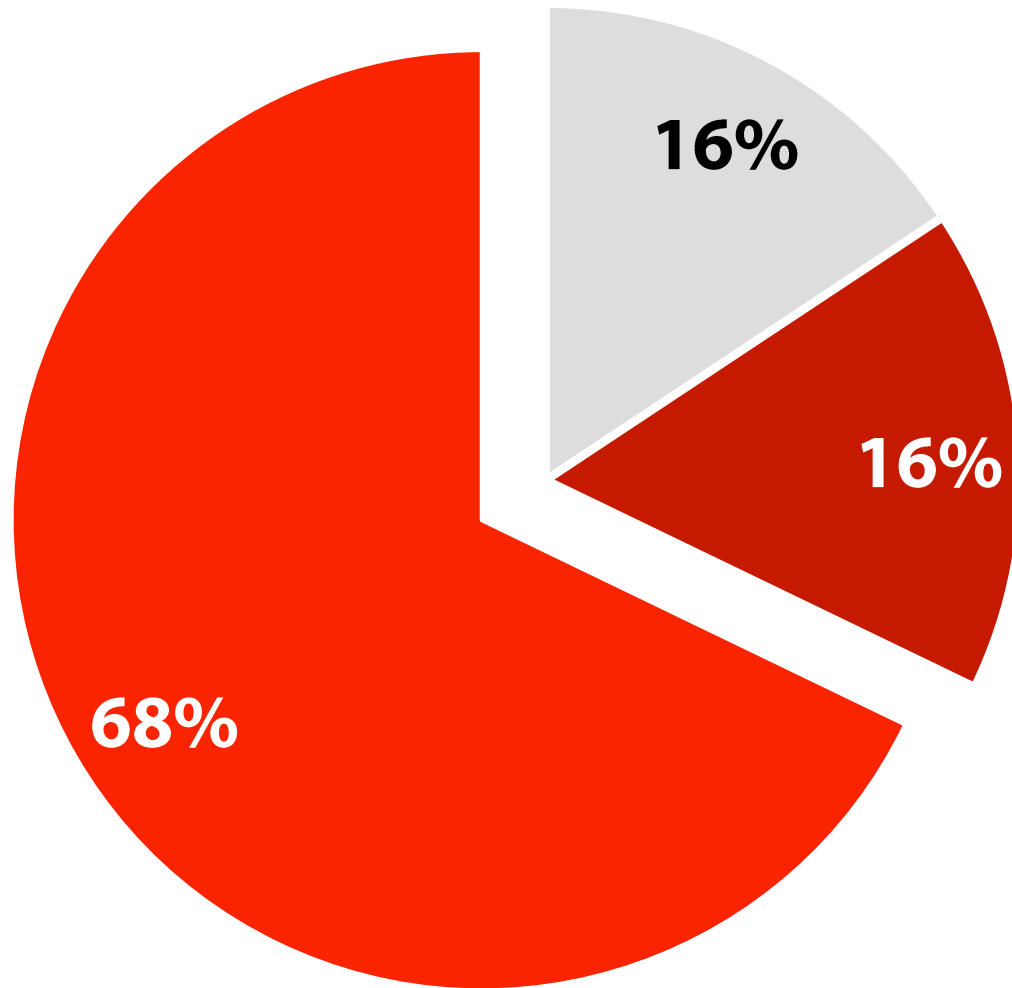
A promotional graphic for CONTROL PAK International. It features a rainbow at the top left. The text "CONTROL PAK International" is prominently displayed. Below this, it states "Manufacturers of the most reliable, and versatile Building Automation Systems since 1976". In the center, there is an image of a computer workstation with multiple monitors. Below that, it says "The EM Solution™ Series Controllers, Host Software, Peripherals and Sensors for Any Application". At the bottom, there is a detailed schematic diagram of a control system with various components and labels. On the left side, there is a vertical menu with "Controllers", "Advisor Support", and "International". At the bottom left, there is contact information for CONTROL PAK INTERNATIONAL, Suite #100, including phone numbers -2800 and -2880, the website trolpak.com, and a "Newsletter" link.

1980's



Today

LIGHT FIXTURE REPLACEMENT - \$17.3M



The District has over 17,000 light fixtures in service and could save roughly 60% in lighting related energy costs

Replacement of existing interior fluorescent and building mounted metal halide light fixtures with new efficient LED fixtures

Energy Savings – \$25.5M

Fixtures, Furniture, + Equipment



FIXTURES, FURNITURE & EQUIPMENT - \$2.68M



BUS PURCHASES - **\$2.4M**

- Replace aging fleet
- Right size fleet
- 21 buses over the next 6 years
- Sustainable bus replacement schedule

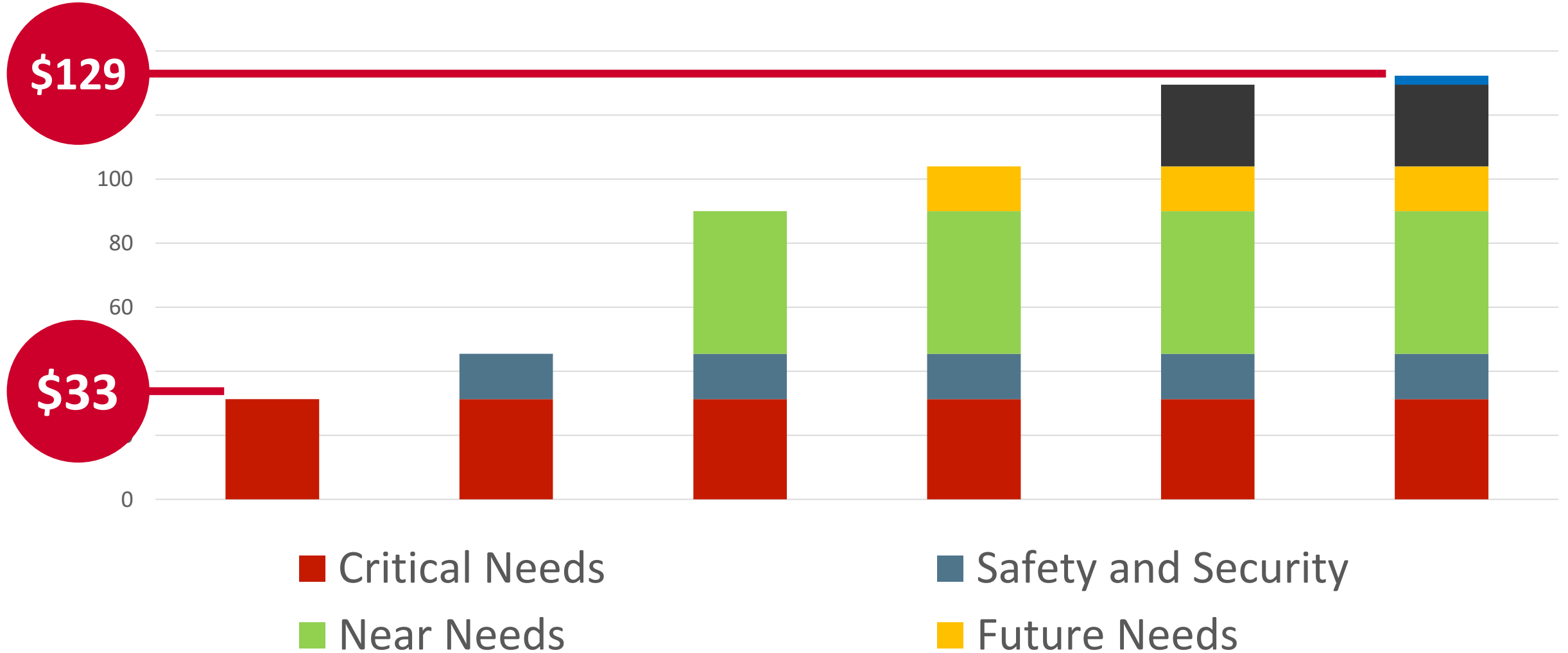


CUSTODIAL EQUIPMENT - **\$267K**

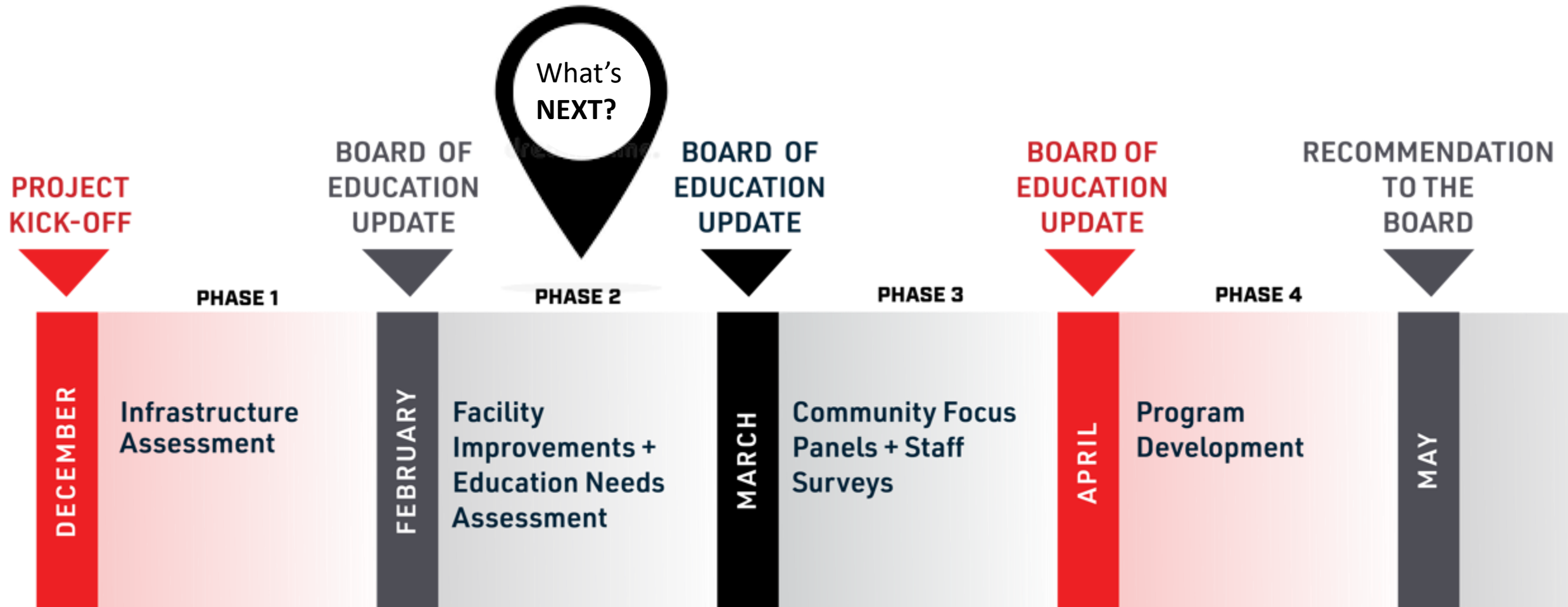
Phase I: Infrastructure Assessment Summary



INFRASTRUCTURE ASSESSMENT SUMMARY



WHAT'S NEXT?



Phase II: Academic and Facility Improvements



Planning Efforts Underway

CTE Program Enhancements

Career Pathways Renovations

High School Reorganization

Secure Entry Additions/Reconfigurations

Toilet Room Additions

Bus Loop and Traffic Modifications

District Reconfiguration and Utilization

Classroom Technology

Storage Facilities

Furniture Replacement

Arts and Athletics Improvements

Outdoor Learning Environments

Re-Imagined Media Centers

Playground Upgrades

Special Education Spaces

Student Technology Devices

STEM Improvements

Phase III: Focus Panels and Staff and Community Survey



PHASE III: Focus Panels and Staff & Community Survey



GATHER FEEDBACK



ENGAGE STAKEHOLDERS



IDENTIFY OPTIONS



REFINE PROPOSAL

Questions?

