

Act 72 School Facilities Assessments

AGENCY OF EDUCATION

Presenters and Key Contacts

AGENCY OF EDUCATION

Jill Briggs Campbell, AOE
Director of Operations

Bob Donohue, AOE School
Facilities Program Manager

Background

- In 2007, The Vermont General Assembly suspended state aid for school construction.
- In the ensuing 16 years, a growing backlog of deferred maintenance and renovation projects has resulted.
- In 2021, the Vermont General Assembly enacted Act 72, an act relating to addressing the needs and conditions of public-school facilities in the state.
- The mandated activities of Act 72 were to support the development of a plan to address the needs and conditions of the State's school buildings to create better learning environments for Vermont's students and increase the equity in the quality of education around the State.
- Act 72 required that the AOE conduct a facilities assessment of the statewide portfolio of school buildings.
- The AOE, in partnership with Bureau Veritas Technical Assessments, LLC, completed these assessments in October 2023 and Supervisory Unions and Supervisory Districts (SU/SDs) have received a building report for each public school in their system in November 2023.

Purpose

1. The facilities assessment was undertaken to gather baseline data as to the overall condition of school facilities.
2. In Act 72, the General Assembly recognized that all districts are not equally resourced. The statewide assessment allowed for all school districts to have equitable access to a comparable assessment methodology.

Purpose, cont.

- 3) The data generated as a result of the facilities assessment work will:
 - a) inform both the School Construction Aid Taskforce and the General Assembly should it undertake a state school construction aid program; and
 - b) reside in a database that the state, and by extension the SU/SDs, will have access to in perpetuity. This database will be critically important for all SU/SDs as they develop the 5-year Capital Improvement Plans required in Act 72 and actively update the database as renovations and upgrades are undertaken. This database will allow for long-term planning for replacement reserve capital expenditures as we move towards implementing proactive and preventive maintenance initiatives.
 - c) The assessment covered 384 buildings

Considerations

Level of Detail and Specificity

- By design, the statewide facilities assessment was intended to be the beginning of a long-term effort to address deficiencies in school facilities.
- The reports that SU/SDs received are a point in time assessment, conducted over a short period of time using established industry standards and definitions.
- These assessments are a higher-level look and provide a means for relative ranking of buildings across a large portfolio of buildings and are not intended to have great specificity.

Vermont Agency of Education – General Scope



- Facility Condition Assessment
 - Deferred Maintenance / Short Term Needs
 - Long-Range Capital Plan
 - ADA high-level review
 - Energy audit
 - PCB cost estimate, if applicable
 - STEM/STEAM Evaluation
 - Capacity (self-reported through survey)
 - Size Verification

Terminology - Condition

Condition Ratings	
Excellent	New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Good	Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Fair	Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
Poor	Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed, or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
Failed	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
Not Applicable	Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present.

Terminology – Plan Type

Plan Types

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the “why” part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the “best” fit, typically the one with the greatest significance. Each of the Key Findings identified below are assigned a Plan Type.

Plan Type Descriptions		
Safety	■	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
Performance/Integrity	■	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system stability.
Accessibility	■	Does not meet ADA, UFAS, Safety and/or other handicap accessibility requirements.
Environmental	■	Improvements to air or water quality, including removal of hazardous materials from the building or site.
Retrofit/Adaptation	■	Components, systems, or spaces recommended for upgrades in order to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	■	Any component or system that is not currently deficient or problematic but for which future replacement or repair is anticipated and budgeted.

Terminology – Immediate Needs/Key Findings

Immediate Needs

Immediate Needs are line items that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) failed or imminent failure of mission critical building systems or components, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

For database and reporting purposes the line items with RUL=0, and commonly associated with *Safety* or *Performance/Integrity* Plan Types, are considered Immediate Needs.

Key Findings

In an effort to highlight the most significant cost items and not be overwhelmed by the Replacement Reserves report in its totality, a subsection of Key Findings is included within the Executive Summary section of this report. Key Findings typically include repairs or replacements of deficient items within the first five-year window, as well as the most significant high-dollar line items that fall anywhere within the ten-year term. Note that while there is some subjectivity associated with identifying the Key Findings, the Immediate Needs are always included as a subset.

Terminology – Facility Condition Index (FCI)

Facility Condition Index (FCI)

One of the major goals of the FCA is to calculate each building's Facility Condition Index (FCI), which provides a theoretical objective indication of a building's overall condition. By definition, the FCI is defined as the ratio of the cost of current needs divided by current replacement value (CRV) of the facility. The chart below presents the industry standard ranges and cut-off points.

FCI Ranges and Descriptions		% of schools in range
0 – 5%	In new or well-maintained condition, with little or no visual evidence of wear or deficiencies.	9.8%
5 – 10%	Subjected to wear but is still in a serviceable and functioning condition.	24.2%
10 – 30%	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	61.1%
30% and above	Has reached the end of its useful or serviceable life. Renewal is now necessary.	4.9%

Depleted Value Index VS Facility Condition Index

- The Depleted Value Index is a measure of a buildings overall amount of consumed system life.
- In the Facilities Inventory Phase of work, the Depleted Value Index was based on self reported information from school districts.
- In the Facilities Assessment Phase, the Facility Condition Index is used, and it is the cost of replacing assets that have met the end of their useful life divided by the Current Replacement Value of the building.
- The Indexes derive different values and are used more for comparing buildings across a portfolio of buildings as a means of prioritizing needs.

Supplemental Evaluations

Square Foot Verification

We have reviewed the square footage of 13,700 square feet and it was found to be 16,000 square feet. This confirmation of the square footage of the facility is based on the exterior wall dimensions and number of stories measured from Google Earth and other publicly available internet searches. We recommend that the square footage be changed to reflect the size as indicated in this verification. This measurement may not reflect the actual heated square footage but provides a general size of the heated square feet of the overall building.

PCB Air Indoor Testing

At the time of the onsite evaluation of this facility PCB air testing has not been conducted. Further ongoing information can be found on the Agency of Natural Resources PCB in Schools website [Agency of Natural Resources PCB in Schools](#).

School Educational Capacity and Programming Space

As part of the FCA report, school administrative staff were asked to conduct a self-assessment of whether their school building meets their space, operational needs and if they have sufficient building capacity and appropriate spaces to deliver educational programming. The school responses to the survey are reported in Appendix D. The respondents indicated that the following areas were inadequate to meet current needs:

A space needs self-assessment was conducted by the school administrative staff which identified space constraints in the following areas:

- Adequate number of classrooms.
- Adequate overall building space.
- Confidential space to maintain FERPA, HIPPA or IEP requirements.
- Administrative offices and/or office space for staff.
- Cafeteria, kitchen and/or gymnasium space.

STEM/STEAM Evaluation

STEM and STEAM education is an integrated curriculum that is driven by exploratory project-based learning and student-centered development of ideas and solutions. BV has evaluated the facility for the existence of spaces and systems to provide STEM/STEAM education based on input from the point of contact for the school. The below table identifies the required standards and to what degree the requirements have been met for the facility.

STEM/STEAM Evaluations				
Property Name	STEM/STEAM Suitability Score	Project Number	School Type	Square Footage
Bingham Memorial School - Main Building	0%	158982.22R000-043.379	Elementary	16,000

Suitability Classification	Scale
Compares Poorly	Score 0 - 25
Compares Marginally	Score 25-50
Compares Fairly	Score 50-75
Compares Well	Score 75 - 100

Score Value	Score Impact
1- Meets	100%
2- Partial	50%
3- Missing	0%

Details of the STEM/STEAM evaluation are included in the appendix of this report. Reference this appendix for specific data associated with this limited survey.

Cost Projections

Cost Projection Qualifiers

- Costs derived from the assessment represent replacement-in-kind costs
 - These costs do not account for additional costs that will be incurred, such as permitting, and any engineering assessments required, waste disposal, materials testing, etc. and a contingency adder could be applied.
- These costs do not address any modernization initiatives in equipment or educational programming spaces.
- These costs do not address overcrowding concerns that may exist, nor do they consider enrollment projections
- All this to say, that there could be additional costs incurred to address other facilities goals.

Summary of Estimated Cost Projections

- Immediate: \$228,613,264
- Short Term (1-2 years): \$341,424,888
- Near Term (3-5 years): \$904,680,288
- Medium Term (6-10 years): \$1,426,800,696
- Long Term (10-20 years): \$3,450,805,816
- Total: \$6,352,324,952

Summary of Program Spending Scenario

- If the level of spending to address identified facilities needs is less than what is required, the cost for unaddressed needs carry over into the next fiscal year.
- This "SNOWBALL" effect will lead to an annual project need that escalates annually and is seen in the highlighted row in the prior slide entitled *Current year project needs*.
- The previous slide shows "Current year project needs" at a hypothetical 10-Million-dollar construction program with 30% state matching.
- At a 30% match of 10 Million, that allows for 33 Million, of facilities work to be done.
- Even if the state matching and local bonding is increased by inflation, the Snowball effect continues.

Construction Programming Spending Scenario

BVTA costs identified for each year

10 million dollar a year construction program with 30% match. \$33,000,000 in project dollars spent towards the need (\$10,000,000 from the state and \$23,000,000 from local bonding)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Annual Amount of Project Needs	297,197,243	221,926,177	221,926,177	392,028,124	392,028,124	392,028,124	370,968,180	370,968,180	370,968,180	370,968,180	370,968,180
Costs rolled over from prior year being under funded		\$264,197,243	\$453,123,420	\$640,640,167	\$996,789,234	\$1,351,405,907	\$1,704,424,737	\$2,034,717,535	\$2,363,273,088	\$2,690,017,198	\$3,014,872,498
Cuurrent year project needs	297,197,243	\$486,123,420	\$675,049,597	\$1,032,668,291	\$1,388,817,358	\$1,743,434,031	\$2,075,392,917	\$2,405,685,715	\$2,734,241,268	\$3,060,985,378	\$3,385,840,678
Project spending (10 million state + 23 million Local Bonding) Increase 4.271% annually for inflation	\$33,000,000	\$34,409,430	\$35,879,057	\$37,411,451	\$39,009,294	\$40,675,381	\$42,412,627	\$44,224,070	\$46,112,880	\$48,082,361	\$50,135,959
Rollover to next year (project dollars unmet)	\$264,197,243	\$453,123,420	\$640,640,167	\$996,789,234	\$1,351,405,907	\$1,704,424,737	\$2,034,717,535	\$2,363,273,088	\$2,690,017,198	\$3,014,872,498	\$3,337,758,317

2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
448,604,756	448,604,756	448,604,756	448,604,756	448,604,756	448,604,756	448,604,756	448,604,756	448,604,756	448,604,756
\$3,337,758,317	\$3,736,227,114	\$4,132,554,604	\$4,526,649,332	\$4,918,415,937	\$5,307,754,985	\$5,694,562,794	\$6,078,731,255	\$6,460,147,643	\$6,838,694,415
\$3,786,363,073	\$4,184,831,870	\$4,581,159,360	\$4,975,254,088	\$5,367,020,693	\$5,756,359,741	\$6,143,167,550	\$6,527,336,011	\$6,908,752,399	\$7,287,299,171
\$52,277,266	\$54,510,028	\$56,838,151	\$59,265,708	\$61,796,947	\$64,436,294	\$67,188,369	\$70,057,984	\$73,050,160	\$76,170,133
\$3,736,227,114	\$4,132,554,604	\$4,526,649,332	\$4,918,415,937	\$5,307,754,985	\$5,694,562,794	\$6,078,731,255	\$6,460,147,643	\$6,838,694,415	\$7,214,249,011