State of Maryland

Interagency Commission on School Construction

Statewide Facilities Assessment
FY 2024 Annual Report

IAC

mdschoolconstruction.org
iac.pscp@maryland.gov
(410) 767-0617

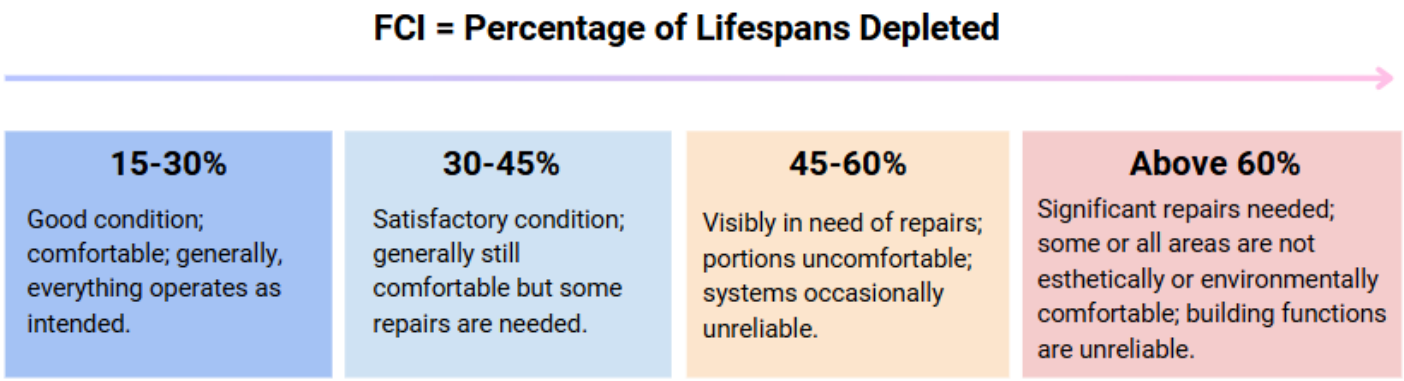
Executive Summary

Education Article § 5-310 of the Maryland Code mandates that the IAC annually assess 1) the condition of public Pre-K–12 school facilities owned by Maryland's local education agencies (LEAs) using a Facility Condition Index (FCI) and 2) the educational sufficiency of those facilities against the State's Educational Facilities Sufficiency Standards (EFSS). The Statewide Facilities Assessment (SFA) was created to give the State the ability to identify the facilities with the highest needs and to provide critical information to both State and local decision makers so that they are better equipped to focus capital dollars on those facilities.

The SFA is a relatively high-level assessment of the key parts and attributes of each facility that most significantly impact teaching and learning, performed in such a way that the resulting data are comparable across all facilities in the state and across time. The SFA collects and produces objective, unbiased data on the condition and educational sufficiency of facilities at the major-component, system-group, facility, LEA, and Statewide levels. Through these data, the SFA paints a summary picture of the condition and educational sufficiency of each facility and communicates to local and State decision makers the locations, characteristics, and levels of the facilities needs in each school district and across the state.

The IAC assesses at least 25% of the state's school facilities annually so that the resulting data does not become older than four years. In each site visit, the IAC's trained professional assessors quantify the condition of the building-system components (called "assets") that contribute most significantly to the facility's effective support of the delivery of educational programs and services. Each facility receives an overall Facility Condition Index (FCI) score, which is the percentage the facility's condition is depleted with respect to the Expected Useful Lifespans (EULs) of its major building-system components. The facility-level FCI is the cost-weighted average of the asset FCIs in the facility. Lower FCI scores represent better conditions.

Figure 1: FCI Bands



For facilities not receiving a physical assessment in a given year, asset FCIs are mathematically aged by one year to maintain comparability of FCI data across all facilities. In addition, LEAs are asked each year to notify the IAC about any capital improvements made to each facility in the previous fiscal year so that IAC staff may update asset records appropriately.

The FY 2024 Statewide average asset FCI is 53%, indicating that, on average, facilities and their systems are approximately halfway through their expected lifespans. A comfortable and more fiscally sustainable average portfolio FCI level would be in the 30-35% range. Figures 2 and 3 below present the number of facilities in each of the FCI bands statewide and by LEA, respectively.

Figure 2: Number of Facilities Statewide in Each FCI Band, FY 2024

FCI	# of Buildings	% of Buildings
Above 60% (Functions Unreliable)	549	40.40%
45% to 60% (Needs Repairs)	552	40.62%
30% to 45% (Satisfactory)	126	9.27%
15% to 30% (Good Condition)	83	6.11%
Less than 15% (Like New)	79	3.61%
Total	**1359**	**100%**

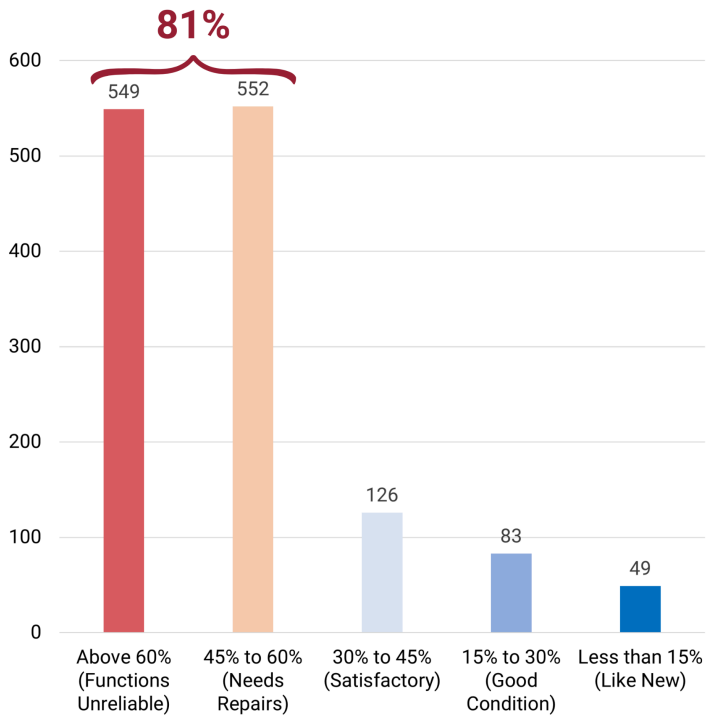


Figure 3: Number of Facilities by LEA in Each FCI Band, FY 2024

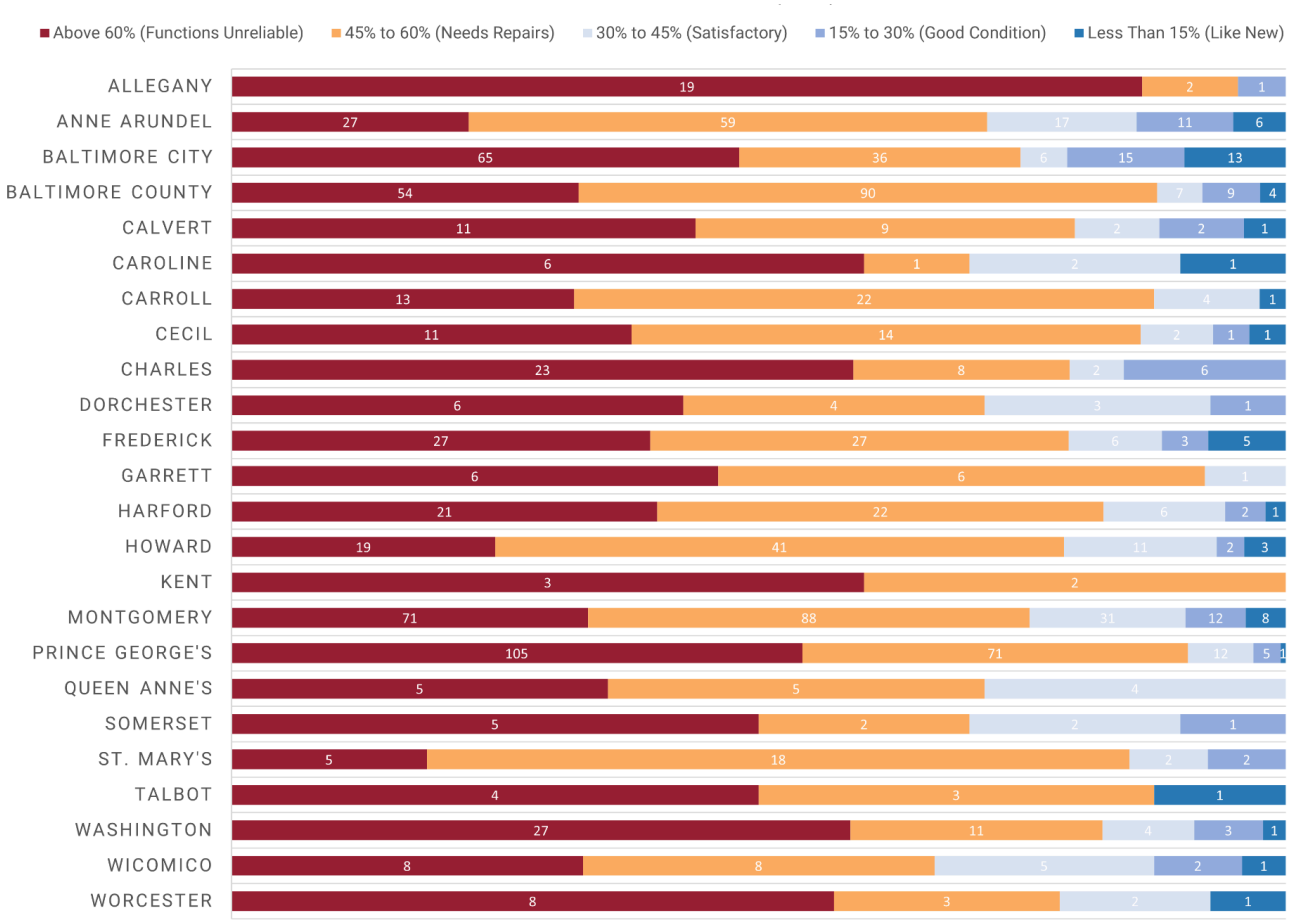
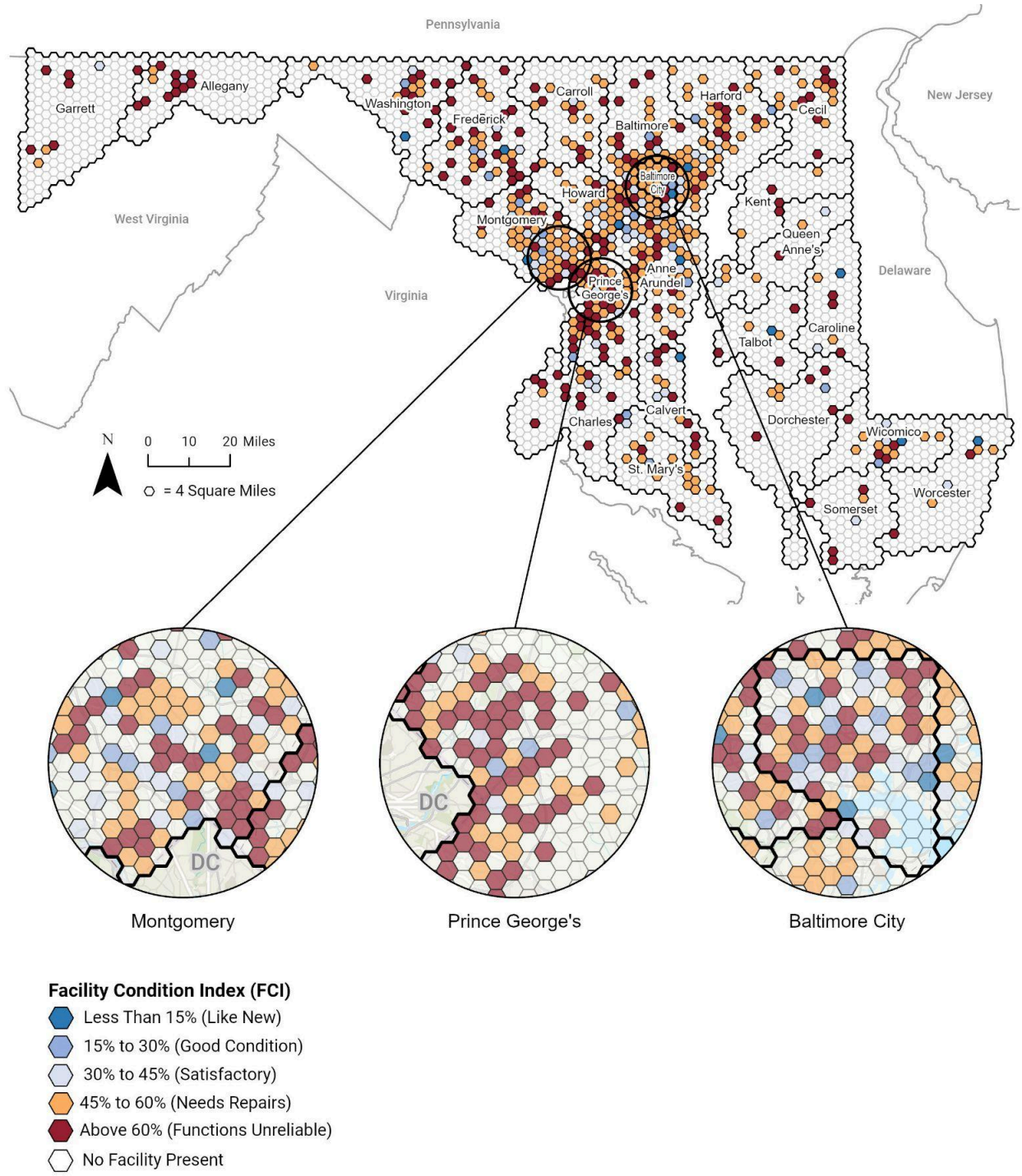


Figure 4 below presents the facility-level FCI scores geographically and within FCI bands. An interactive version of this map is available on the IAC's website.

Figure 4: FCI Scores Statewide Mapped, FY 2024



Scope of the SFA

The SFA began in Fiscal Year 2021 with a baseline assessment of all active and holding (swing space) public Pre-K–12 school facilities owned by Maryland's 24 LEAs in 2020. Since the baseline, the IAC has re-assessed 1,076 or 79% of the facilities statewide and is on track to complete the re-assessment of the remaining 21% in FY 2025. Table 1 below shows the number of facilities assessed each year through FY 2024.

Table 1: Number of Facilities Assessed by Fiscal Year

Fiscal Year	Cycle	# of Active/Holding Facilities	# of Facilities Assessed
FY 2021	Baseline	1,383	1,383
FY 2022	Refresh 1	1,386	392
FY 2023	Refresh 2	1,366	328
FY 2024	Refresh 3	1,359	356

Methodologies and Results for FY 2024

Pursuant to Ed. Art. §§ 5-310(c) and 5-310(e)(2), the primary measure of facility condition is the FCI. The SFA measures the condition of each of about 40 to 60 major building-system components—called "assets"—in each facility. The asset-level FCI is calculated using the following formula:

$$\frac{(\textit{Expected Useful Lifespan}\ (EUL) - \textit{Observed Remaining Useful Lifespan}\ (ORUL))}{\textit{Expected Useful Lifespan}\ (EUL)}$$

The asset-level FCIs are then used to calculate a cost-weighted average FCI for each of the seventeen major building systems within a facility and a cost-weighted average FCI for each of the seventeen major building systems across an LEA, as summarized in the following table. In addition, for each LEA, the table shows the average Projected Lifespans as a Percentage (PLP) of the expected useful lifespans of the assets to indicate how much additional lifespan the LEA is achieving through its maintenance practices.

Table 2: Average Statewide and LEA-wide FCIs by System Group, FY 2024

LEA	Average FCI	Ceilings	Conveyances	Electrical Distribution	Flooring	HVAC	Interior Construction	Interior Doors and Hardware	Life Safety	Modulars	Plumbing Fixtures	Program Support Equipment	Relocatables	Roofs	Site	Skin	Structural	Wall Finishes	PLP*
State-Wide	**52.63%**	**62.70%**	**55.05%**	**54.07%**	**62.82%**	**56.88%**	**52.61%**	**55.67%**	**51.77%**	**53.61%**	**58.57%**	**64.55%**	**59.07%**	**56.57%**	**56.02%**	**53.77%**	**38.32%**	**56.03%**	**118.07%**
Allegany County	62.42%	74.07%	73.41%	65.80%	73.01%	70.98%	56.83%	70.90%	69.42%	N/A	71.02%	74.79%	N/A	47.20%	65.12%	66.09%	50.50%	67.96%	130.52%
Anne Arundel County	48.53%	56.99%	51.74%	50.89%	59.88%	53.12%	48.35%	36.82%	47.00%	38.25%	58.48%	58.49%	49.68%	58.22%	47.15%	48.26%	32.67%	44.77%	116.65%
Baltimore City	52.73%	61.87%	48.42%	51.92%	68.45%	51.19%	54.83%	57.84%	42.81%	60.60%	55.94%	64.40%	70.11%	55.27%	50.13%	54.86%	45.99%	63.28%	124.13%
Baltimore County	53.03%	64.66%	54.86%	48.18%	69.01%	52.65%	55.11%	58.60%	52.43%	46.95%	61.46%	67.64%	42.58%	54.47%	63.90%	54.43%	41.76%	65.06%	119.56%
Calvert County	50.11%	60.41%	60.02%	53.21%	47.98%	57.15%	46.19%	51.68%	54.48%	92.53%	55.83%	53.22%	71.99%	64.45%	56.74%	51.35%	25.97%	49.03%	113.64%
Caroline County	51.87%	62.44%	52.29%	53.46%	47.49%	61.61%	50.62%	46.48%	48.27%	95.00%	44.50%	54.83%	51.40%	58.45%	50.08%	55.24%	41.21%	56.16%	113.13%
Carroll County	55.55%	65.90%	67.92%	63.37%	62.59%	66.17%	52.24%	65.52%	60.07%	83.46%	61.86%	70.38%	73.87%	41.98%	64.23%	56.29%	37.60%	71.51%	116.23%
Cecil County	57.07%	70.06%	71.08%	57.25%	68.98%	66.25%	55.84%	63.61%	58.84%	64.14%	60.91%	68.11%	48.53%	60.89%	60.44%	57.33%	38.88%	61.96%	115.98%
Charles County	54.99%	63.51%	52.26%	57.93%	62.41%	61.16%	49.48%	52.36%	52.56%	77.95%	61.02%	61.36%	76.74%	65.15%	56.18%	54.80%	35.33%	43.34%	118.90%
Dorchester County	47.98%	66.39%	51.59%	51.89%	62.49%	64.60%	34.57%	57.67%	53.88%	82.74%	61.88%	64.78%	69.30%	32.29%	55.77%	45.56%	30.79%	65.80%	118.00%
Frederick County	50.04%	64.65%	54.96%	51.22%	56.19%	60.15%	47.75%	53.53%	48.31%	54.23%	53.61%	60.64%	64.52%	58.57%	52.86%	49.87%	33.34%	48.32%	115.03%
Garrett County	59.86%	75.12%	72.66%	66.05%	58.97%	58.45%	59.38%	69.66%	63.71%	70.00%	73.56%	60.74%	53.33%	68.31%	54.26%	59.58%	44.95%	47.65%	114.12%
Harford County	52.27%	58.74%	58.65%	47.86%	64.22%	57.02%	51.53%	59.15%	56.94%	50.65%	63.36%	67.48%	67.85%	59.34%	54.70%	54.12%	37.41%	65.68%	116.87%
Howard County	48.98%	55.77%	55.90%	44.75%	55.66%	59.25%	47.64%	46.67%	48.71%	35.18%	51.79%	61.65%	61.13%	58.09%	54.29%	49.89%	34.30%	44.77%	110.44%
Kent County	62.27%	74.90%	80.00%	58.92%	65.99%	61.82%	62.34%	61.28%	64.57%	N/A	69.99%	84.21%	N/A	54.35%	66.13%	66.23%	57.22%	N/A	120.24%
Montgomery County	50.09%	61.23%	57.93%	57.18%	60.84%	55.00%	49.24%	53.95%	50.74%	40.47%	53.84%	63.68%	53.06%	50.31%	53.73%	50.59%	33.26%	55.13%	113.23%
Prince George's County	57.96%	68.04%	51.49%	61.33%	64.21%	58.64%	58.20%	67.88%	59.43%	46.61%	64.97%	69.34%	65.70%	65.96%	62.27%	58.75%	42.23%	49.16%	126.49%
Queen Anne's County	52.52%	68.43%	52.73%	53.44%	50.63%	65.85%	52.43%	49.74%	51.13%	75.00%	51.48%	61.98%	55.00%	60.42%	48.75%	53.10%	37.49%	58.55%	111.78%
Somerset County	49.43%	53.19%	53.82%	49.00%	55.75%	52.19%	53.09%	47.37%	47.84%	80.00%	50.47%	60.33%	56.96%	43.45%	63.29%	55.55%	40.14%	49.56%	112.13%
St. Mary's County	53.97%	59.24%	61.19%	55.41%	47.27%	63.92%	52.11%	52.47%	46.33%	57.08%	61.11%	57.51%	76.01%	57.94%	49.89%	59.09%	41.77%	48.55%	112.57%
Talbot County	48.46%	60.46%	59.00%	49.81%	44.89%	56.88%	52.67%	45.85%	51.87%	90.00%	45.33%	51.71%	N/A	47.04%	38.42%	55.04%	42.12%	25.20%	113.96%
Washington County	57.58%	68.43%	53.35%	61.12%	60.78%	62.67%	58.15%	66.50%	63.86%	49.34%	69.95%	72.29%	60.52%	52.30%	61.82%	54.80%	46.64%	46.69%	119.99%
Wicomico County	51.08%	55.73%	50.07%	51.35%	62.54%	54.71%	49.91%	56.29%	46.24%	54.35%	54.60%	67.87%	75.66%	53.23%	50.01%	54.39%	38.76%	82.00%	112.93%
Worcester County	54.03%	65.30%	62.87%	52.43%	54.85%	65.01%	49.44%	54.32%	55.64%	N/A	63.07%	61.29%	81.91%	60.08%	56.25%	54.95%	36.96%	64.60%	117.24%

* Projected Lifespan as a Percentage (PLP) of Expected Useful Lifespan

In addition to the FCI, Ed. Art. § 5-310(b)(2)(ii) requires that the assessments include data on the following items, organized here into Groups as follows. Many of these items are inherently difficult to assess due to potentially rapid changes occurring throughout a given day and from season to season, as well as due to varying approaches to facilities operations across Maryland's LEAs. The IAC's methods for collecting data for each of these items are described below.

Group A: The functionality of heating, ventilation, and air-conditioning (HVAC) systems; life-safety systems; roofs; emergency-communication systems; and any additional critical building systems identified by the IAC.

The SFA measures the condition of these systems in the form of an FCI figure for the HVAC system; an FCI figure for the life-safety systems, which includes fire alarms; and an FCI figure for the electrical-distribution system, which includes the emergency-communication system. These figures at the LEA level are shown above in Table 2 and are available at the facility level upon request.

Group B: Temperature, humidity, and carbon-dioxide levels.

Constantly changing conditions and variable building-occupant loads make meaningful measurements impossible during IAC site visits that occur only once every four years. In light of this, the IAC requests via a survey tool that each LEA identifies the percentage of space in each of its facilities in which these levels are persistently outside the parameters specified in the EFSS.

As of FY 2024, LEAs have reported that there are 129 facilities experiencing persistent systemic temperature issues; 151 facilities experiencing persistent systemic humidity issues, and 14 facilities experiencing persistent systemic issues with CO2 levels. There is significant overlap between these three categories; 126 facilities had more than one of the three issues.

Group C: Lighting and acoustic levels.

Because measuring the effectiveness of lighting and the acoustic levels throughout an entire facility is not feasible with the resources and staffing available to the IAC, the IAC requests via a survey tool that each LEA identifies the percentage of space in each facility in which these levels are persistently outside the parameters specified in the EFSS. The IAC can then quantify for any facility the deficiencies relating to lighting or acoustics.

LEAs identified a total of 11 facilities that have persistent acoustic issues and 12 facilities that have persistent lighting issues.

Group D: The presence of lead paint and asbestos.

Because testing for lead paint and the presence of asbestos is both time- and cost-prohibitive for the IAC within current available resources, the IAC requests via a survey tool that each LEA identifies the percentage of space in each facility in which friable Asbestos Containing Materials (ACMs) and friable/peeling Lead Paint has resulted in a loss of use of spaces or closure of the facility.

Thirteen LEAs reported that there was lead paint present in a total of 489 facilities but that none of those instances included friable or peeling lead paint that resulted in the loss of use of spaces or facility closures. Twenty-three LEAs reported that there are ACMs in a total of 732 facilities but that no ACMs were friable and resulted in the loss of use of spaces or facility closures.

Group E: A lack of needed kitchen sanitary equipment, safety equipment in laboratory spaces, and needed health room attributes.

Because health codes vary from county to county, local curricular expectations for laboratory science instruction vary from LEA to LEA, and health rooms are often inaccessible to IAC assessors during site visits due to the presence of students, the IAC requests via a survey tool that each LEA identifies when a facility's health room is missing needed attributes, a facility's laboratories are missing needed safety equipment, and a facility's kitchen is missing needed sanitary equipment.

LEAs reported that 316 schools are missing health room attributes considered to be necessary under local requirements; 153 facilities lack lab safety equipment considered necessary under local requirements; and 14 facilities are missing kitchen equipment considered necessary under local requirements.

Further Refinement of Methodologies

As noted above, due to the nature of the items included in Groups B through E, it is beyond the current resources of IAC staff to directly collect data on those items during site visits. However, in order to identify options for obtaining such data, IAC staff are working with LEAs to explore potential methodologies by which the LEAs as the owners and operators of the facilities might affordably collect such data and submit the data efficiently to the IAC for inclusion in the annual results of the SFA. The IAC is looking to complete this exploration during 2025 and expects to report its findings in future reports.