



# Facilities Information Management

A Guide for State and Local Education Agencies

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Education Facilities Data Task Force National Forum on Education Statistics

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The information and opinions published here are the product of the National Forum on Education Statistics and do not necessarily represent the policy or views of the U.S. Department of Education or the National Center for Education Statistics.

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## **Foreword**

The National Forum on Education Statistics (the Forum) is pleased to release this Guide, the latest in a series of publications designed to promote good practices relating to the collection, maintenance, and use of education data. The work was supported by the National Center for Education Statistics (NCES). As the statistics agency for the U.S. Department of Education, NCES maintains a cooperative education statistics system with the states to improve the quality, comparability, and uniformity of elementary and secondary school data. The Forum members are states, school districts, and other institutions that are major providers or consumers of education data. The Forum's goal is to encourage cooperative data improvement at all levels of education governance.

In 1997, the Forum published *Basic Data Elements for Elementary and Secondary Education Information Systems*. That document recommended a set of basic data elements about students and school staff that, if maintained at the school, district, and state levels in a standardized format, would give decision makers comparable information upon which to base policy for promoting effective education. Other recent publications of the Forum include *Safety in Numbers: Collecting and Using Crime, Violence, and Discipline Incident Data to Make a Difference in Schools; Building an Automated Student Record System; Safeguarding Your Technology; Technology at Your Fingertips; Protecting the Privacy of Student Records; and Privacy Issues in Education Staff Records.* 

As part of its ongoing effort to promote data-driven educational policy decision-making, the Forum formed the Education Facilities Data Task Force. This Task Force met over a period of 3 years to identify and define the basic data elements related to public school facilities. It also identified a framework of indicators to answer important policy questions relating to the condition, design, utilization, management, and funding of school facilities. The Task Force's efforts culminated in this publication.

It is our hope that this Guide will contribute to the development of valid and comparable information on school facilities that will support the drafting of legislation, policy-making, research, and dissemination of information to government agencies, funding sources, and the general public.

Patricia Murphy, *Budget Administrator*Utah State Office of Education and
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### Introduction

There are 96,000 public schools in the United States governed by 17,000 school districts in 50 states and the extra-state jurisdictions. Facilities planners and school district officials at the local level often do not have data systems that support the complex and demanding responsibilities of decision-making, planning, management, oversight, and funding of school buildings. Moreover, even when facilities data at the building level are maintained at the school or district level, these data may not be available to state education agencies. Thus, there is a "missing link" between the information maintained by facilities managers in school districts and the information needed for policy planning and implementation at the state and national level.

Within a district over time, as well as at the state level, facilities data and information are often maintained inconsistently. The data may be collected and organized in various formats, or different definitions may be used for the same terms. Therefore, while many states conduct facilities assessments, it is hard to generalize findings across states. Moreover, some states conduct facilities studies on a regular basis, while others use ad hoc surveys that assess specific needs but may not support future information needs. Without consistently defined indicators, policy makers cannot accurately assess the amount of funding needed for school construction, where funds for new schools are most needed, or whether funds are being spent efficiently or equitably.

This Guide has been developed to provide a framework for decision makers, school facility managers, and the public to identify a basic set of school facilities data elements, including definitions that will meet their information needs. Chapter 1 describes the purpose, scope, and intended audiences for this Guide. Chapter 2 describes how to use this Guide to develop a customized information system, including how the facilities data should link to other data systems. Chapter 3 examines some key measures—such as school utilization, functional age, deferred maintenance, and expenditures per student—and discusses the challenges in standardizing the definitions of these terms. Chapter 4 lists hundreds of facility data elements, including standard definitions and "options," categorized into six sections: identification, condition, design, utilization, management, and budget and finance. Chapter 5 identifies additional resources, including sources for data elements and their definitions, that will be helpful to those involved in compiling school facilities data.

<sup>&</sup>lt;sup>1</sup> Tiffanie Lee and Oona Cheung, *An Analysis of State Collection and Reporting on School Facilities Data, Working Draft* (Washington, DC: Council of Chief State School Officers, 1998).



#### Chapter 1

## Purpose and Scope

#### Purpose of This Guide

Decisions about school funding, renovation, modernization, and infrastructure improvements need to be supported by high-quality and timely data. This Guide provides a framework for collecting, evaluating, and maintaining education facilities data and for using this information to answer important policy questions about school facilities. A complete and current education facilities database—whether at the local, state, or national level—can help state and local education agency planners, national policy makers, and the general public answer questions concerning the inventory, condition, design, utilization, management, and funding of public schools.

This Guide is designed to assist education systems in the following areas:

- policy-making and decision-making at the district, state, and national levels;
- operations, management, and improvement of local and state education systems and federal education programs;
- greater comparability of facilities statistics at all governance levels;
- greater compatibility between facilities data and other school-related data systems; and
- development of a process to plan and implement a data system.

School and district data users will find the data elements and indicators easy to incorporate into their planning and management systems and, at the local level, they will be useful for day-to-day management and extended planning. Most of the data elements and indicators defined in this Guide are already used by school business officials, but this Guide will help to standardize terminology associated with K-12 educational facilities in the public sector, including its use by private-sector vendors as they develop and update commercial facilities maintenance software packages. The recommendations in this document are meant to serve as the "best practice" guidelines to enable state education agencies to promote the collection of high-quality and useful data at the local level.

#### Scope of This Guide

A three-tier approach—consisting of policy questions, indicators, and data elements—has been used in this Guide to provide a logical framework for an analysis of the condition, design, utilization, management, and funding of public school facilities. Rather than attempting to provide a comprehensive list of data elements, this



Policy goals frame the scope of the inquiry and provide general directions for decision-making.

Guide identifies and defines a subset of data elements that are critical to answering important policy questions relating to elementary and secondary school facilities.

Policy goals frame the scope of the inquiry and provide general directions for decision-making. These goals are broad in scope, require subjective analysis and values clarification, and may not be answerable by statistical data elements alone. For example, the seemingly simple question "Are our school facilities adequate?" rests on a host of complex beliefs about what comprises a good education and the social role of schools, as well as the quality of the school buildings themselves.

Information systems developed using the facility data elements identified in this Guide will help policy makers and others address the following important policy questions:

ı. Inventory	<ul><li> How many schools are in the school district and community?</li><li> What is their age, size, and location?</li></ul>
2. Condition	<ul> <li>Are the schools and support service facilities safe, healthful, and in good repair?</li> </ul>
3. Design	<ul> <li>Are the school buildings designed to support best educational practices and help students achieve at high levels?</li> <li>Are the operations and administrative buildings designed for efficient operations and administration?</li> </ul>
4. Utilization	<ul> <li>Do the schools provide sufficient space to accommodate changing enrollments and community use?</li> <li>Are the administrative buildings fully used?</li> </ul>
5. Management	<ul> <li>Are school district facilities managed effectively and efficiently?</li> <li>Are they managed by the school district, private contractors, or another government agency?</li> </ul>
6. Budget and Finance	<ul> <li>Are capital budgets and operating funds for school district facilities adequate, and are they equitably allocated and distributed?</li> </ul>

These questions are not easy to answer. Thousands of bits of information need to be collected and analyzed before questions such as these can be answered responsibly. However, once data elements are assembled in an electronic database, they can be used to evaluate indicators of adequacy, efficiency, equity, and effectiveness. Indicators are data elements, or more often, combinations of data elements, that provide information that can help answer policy questions about the education system. The indicators described in this Guide are used to measure the "health" of education facilities. The answer to the broad question of whether today's schools are adequate can only be determined by looking at numerous indicators. These may include such things as projected student growth, an assessment of an older school's adaptability to offer programs that did not exist when the building was constructed, or the capacity of schools to support smaller class size or support the integration of technology in the curriculum.

By providing the information that is needed to answer specific key policy questions, indicators help tell the story of the inventory, condition, design, utilization, management, and funding of school facilities. They link the policy questions to the data elements through their use in analysis and communication of complex situations and conditions. While no single data element can present a full picture of school facilities, there are a few key indicators that are particularly robust story-tellers. Very often these indicators do not provide meaningful information until they are combined, or measured over time. For example, "number of classrooms," "gross square feet of building space," "class size," and "enrollment capacity" are some of the data elements that, taken together, determine the degree to which school facilities are being utilized and help answer the policy question: "Do we need to build more schools?"

Following is another example of the relationship among policy questions, indicators, and data elements:

#### **Policy Question**

Are the teaching, learning, and support service environments safe, healthful, and in good repair?

**→** Indicator

- The school is safe for occupancy.
- → Examples of Data Elements
- Fire Protection System Type (#2080)
- Installation Date (#2440)
- Last Check Date (#2444)

Indicators help tell the story of the inventory, condition, design, utilization, management, and funding of school facilities.

When the 1995 General Accounting Office (GAO) report<sup>3</sup> was released, the indicator of facility condition that stayed in the minds of the public was that \$113 billion was needed for school facilities improvements nationwide. This simple number was able to communicate a complex story only because it was supported by thousands of data elements.

Data elements are the basic units, the "building blocks," of information. They are generally quantifiable and measurable. This Guide identifies the basic data elements that have been judged to be most useful in answering a full range of policy questions about school facilities, which include the school buildings themselves and their related outdoor areas (such as playing fields, parking lots, and playgrounds), as well as administrative buildings (including administrative offices, bus garages, and warehouses) owned and operated by a school district. The scope is limited to identifying the most important pieces of information that are feasible for school districts to keep in their data systems and that can be compiled and aggregated to develop statistics describing the inventory, condition, design, utilization, management, and funding of educational and administrative facilities operated by public school systems.

The data elements that are included and defined in this Guide will help education stakeholders with tasks such as these:

- identifying building and grounds inventory;
- assessing the condition of building systems and components;
- describing the quality and character of facilities design;
- evaluating the utilization of educational and administrative facilities;
- describing the school district's management of facilities; and
- reporting on facilities funding.

Data elements are the basic units of information.

Chapter 1: Purpose and Scope

The goal is facilities data that allow for meaningful comparisons among schools and among school districts.

Data elements on furniture, fixtures, and movable equipment are excluded from this Guide. Data elements relating to technology use in schools and by school administrators are the focus of another Forum publication. Existing definitions from other sources are used wherever possible and appropriate.<sup>4</sup> This Guide does not try to define architectural and construction data elements except where they have a unique meaning as applied to schools. It is not meant to include all of the information about school facilities needed to run a school district, but rather focuses on the data needed to answer policy questions. These data elements can be used to collect comparable education information at all levels of the school system.<sup>5</sup> Related data can be drawn from other sources, including student, staff, finance, and facilities databases. The goal is facilities data that allow for meaningful comparisons among schools and among school districts.

#### **Audiences for This Guide**

The information in this Guide will be of use to persons who manage or plan education facilities; members of local school boards, state education agencies, and state boards of education; and government officials who need dependable information to set long-term directions. It will also serve decision makers who have a broader purview that includes but is not limited to schools, such as municipal planners and state and federal legislators. Since questions about program effectiveness and efficiency often require information about the capacity of school facilities and their ability to support instructional programs, this document is expected to also serve the needs of federal agencies, education interest groups, researchers, school administrators, and members of the business community. Moreover, to the extent that this document facilitates the collection of clear and comprehensive facilities data, members of the media and the general public will be in a position to better understand and analyze school facilities issues.

#### Sources and Methodology

This Guide was written under the direction of the Education Facilities Data Task Force, which was established by the National Education Statistics Agenda Committee of the National Forum on Education Statistics, to identify the basic data elements for education facilities data. The Task Force, supported by the Administrative Records Development Project of the Council of Chief State School Officers, began by examining current data needs and collections. Two principal sources of data elements and definitions that were identified and extensively used by the Task Force were the NCES publications *Property Accounting: A Handbook of Standard Terminology* and *A Guide for Classifying Information about Education Property* (also referred to as Handbook III, Revised 1977, now out of print). The conceptual framework of interconnecting policy questions, indicators, and data elements is modeled on the Task Force's predecessor and its 1997 report, *Basic Data Elements for Elementary and Secondary Education Information Systems*, which focused on student and staff data. This was the second major source for the current Guide.

Project staff also examined federally required definitions or standards, including the Americans with Disabilities Act Accessibility Guidelines, information from the Office of Safety and Health Administration (OSHA), Indoor Air Quality Basics

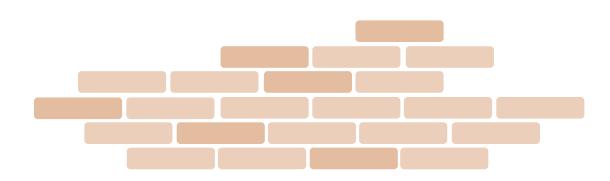
for Schools, and others. The goal was to identify data elements, together with "best-practice" definitions from professional resources such as the International Building Code, International Fire Code, publications of the American Institutes of Architects, as well as input from school security and emergency response teams.

Staff from the Council of Chief State School Officers reviewed currently available data in their report *An Analysis of State Collection and Reporting of School Facilities Data*. This description of actual information, when compared with the desired information identified from other sources, laid out the general scope and direction for the task force.

With a list of data elements, the Task Force began to narrow the focus based on the agreed-upon criteria (described in Chapter 3) for selection. The Task Force identified key measures of the indicators, and defined them to show how they incorporated the data elements.

Finally, the draft *Guide for Collecting and Using Data on Elementary and Secondary Educational Facilities* was reviewed by many interested parties (including architects, school business managers, and school facilities planners) for comprehensiveness and accuracy. These reviewers' insights and perspectives were invaluable in shaping the final document.

In summary, the Guide took as its sources both current and recommended practice, and relied upon the advice of subject experts and data users to organize the information in a logical, accessible product. This same process will be followed in subsequent revisions of the Guide in hope that it will remain a useful tool for schools and school planners for some time.



Chapter I: Purpose and Scope

 $<sup>^2</sup>$  National Forum on Education Statistics, Basic Data Elements for Elementary and Secondary Education Information Systems (Washington, DC: U.S. Department of Education, 1997), p. II-3.

<sup>&</sup>lt;sup>3</sup> General Accounting Office, *America's Schools Not Designed or Equipped for 21st Century* (Washington, DC: U.S. General Accounting Office, 1995), p. 20.

<sup>&</sup>lt;sup>4</sup> National Forum on Education Statistics, Technology in Schools Task Force, *Technology in Schools:* Suggestions, Tools, and Guidelines for Assessing Technology in Elementary and Secondary Education (NCES 2003-313) (Washington, DC: U.S. Department of Education, 2002), p. 29-39.

<sup>&</sup>lt;sup>5</sup> National Forum on Education Statistics, *Basic Data Elements for Elementary and Secondary Education Information Systems* (Washington, DC: U.S. Department of Education, 1997), p. II-2.



# Customizing a School Facilities Data System

There is no federal or state mandate for collecting the basic data elements identified in this report, nor is there any expectation that all of the data elements will be useful in every situation. The policy questions, indicators, and basic data elements described in this Guide are intended to serve as a framework that state and local education agencies can use to identify their own education facilities information needs and to promote the standardization of facilities data. By tailoring these basic data elements to reflect local situations, a state or local education agency should be better able to respond to questions posed by educators, the community, and the public about the condition of facilities.

Implementing an information system using these data elements, however, requires the commitment of all those involved in providing, collecting, maintaining, reporting, and using the data. A 1997 report of the Forum, *Basic Data Elements for Elementary and Secondary Education Information Systems*, suggests a process for selecting basic data elements that state education agencies and school districts can use to support the development of a more effective education facilities information system at the state and local levels. The process for selecting data elements and strategies for putting such a system in place are summarized here.

#### **Process for Selecting Data Elements**

The process for selecting and screening the content components of an information system is pivotal to ensuring the collection of useful, valid, cost-effective facilities information. Adopting the basic facilities data elements included in this document, or adapting and incorporating them in part, works best as a collaborative exercise between those who manage information systems and those who use the information such systems produce. Putting in place a system to routinely support education decisions requires the commitment of all those involved in providing, collecting, maintaining, reporting, and using the data.

From an early stage, all parties involved in facilities operations and management should be involved in designing the data collection system. The advice and support of all stakeholders—including facilities planners, business managers, architects, data management staff, risk management personnel, security personnel, school administrators, school board members, and interested members of the general public—should be sought. The following process can help ensure that the resulting system provides accurate, reliable, and useful data.

The process for selecting and screening the content components of an information system is pivotal.



#### Step 1

#### Identify and involve stakeholders.

Promoting "ownership" of the process will enhance its eventual success. Identify the issues that are important to each group of stakeholders and discuss ways to address them. Anticipate possible resistance to change and encourage everyone who will be affected by the process to get involved from the very beginning.

#### Step 2

#### Identify information needs.

Identify information that is needed to administer programs, meet state and federal legislative and compliance reporting requirements, and address policy priorities that are unique to the state.

#### Step 3

#### Identify data elements that will generate the needed information.

Use this Guide to identify the data elements that will address your information needs. If additional data elements are needed to answer specific questions, be sure they are precisely defined.

#### Step 4

#### Review definitions of data elements.

Using existing definitions of data elements will jump-start the process; however, definitions should be adapted to state or local requirements.

#### Step 5

#### Examine the quality of data elements.

Evaluate the quality of the data elements under consideration by applying any of the following criteria that are relevant:

- The data element should be collected on a regular and timely basis.
- The data element should be reliable.
- The data element should be valid.
- The data element should be quantifiable, or otherwise measurable.
- The data element should be consistently defined by a recognized body.

The data elements, considered as a whole, provide for valid measures of the desired indicators.

#### Step 6

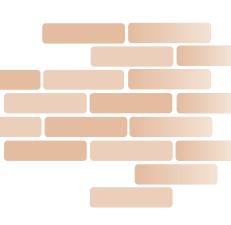
#### Consider the efficacy of the selected data elements.

Ask whether the selected data elements provide a net savings in data collection and reporting efforts or a net gain in availability and utility of information. Weigh the costs of data collection versus the benefits to those who will use the information.

#### Step 7

#### Update the data elements periodically to reflect changing information needs.

The data system should be examined periodically to determine whether new types of information are needed to address emerging state and local issues.



As policy makers move in new directions, different types of information may be needed. For example, if funds are allocated to reduce class size, information on school utilization is critical to assessing whether space is available for these smaller classes.

#### **Putting the System in Place**

Developing an efficient information system is an ongoing activity, not a one-time event. The following procedures describe a methodology to help ensure that the information system is integrated into the daily operations of the school district or state agency.

#### Strategy 1

#### Adopt a process for selecting basic data elements.

State education agencies should bring together representatives of schools and districts within the state to discuss information needs and ways to collect and record the information. In many states, conducting an ongoing facilities assessment is an "unfunded mandate." Districts have minimal incentive to provide information for items that are not funded by the state. The state education agencies could use this opportunity to improve the availability, accuracy, and comparability of data they collect in the aggregate. A consensus from these stakeholders should determine what data must be collected by all schools and districts within the state, including standard definitions and data collection procedures.

#### Strategy 2

#### Incorporate the process into all data planning and development activities.

State education agencies can use this Guide to review the contents of their existing information systems and the processes used to collect, analyze, and report data. Redundant and conflicting data collection methods should be eliminated. Data collectors and users should be brought together to ensure that the data collection process is efficient and effective.

#### Strategy 3

#### Use this Guide to encourage schools and districts to provide better-quality data.

The basic data elements in this Guide can be used to encourage schools and districts to collect the needed information and use definitions that will promote the comparability of data.

#### Strategy 4

#### Provide training and support for schools and districts to use the basic data elements.

Data providers and users at all levels will be more concerned with the accuracy of the information that is being collected and maintained if they understand how they will benefit from it. Developing an efficient information system is an ongoing activity.

#### Strategy 5

Advertise compelling reasons for districts and schools to use the basic data elements.

Although it may be generally accepted that our nation's school facilities need to be the best possible if they are to meet current and future education goals, the relationship between high-quality data and wise decision-making about facilities may not be readily apparent to policy makers and the public.

#### Strategy 6

Work with software vendors to incorporate the basic data elements and their definitions.

Many data system software applications are available to assist local facilities planners and architects with the operation and management of facilities. To the extent that the basic data elements and definitions are incorporated into their programs, facilities information will be more comparable across systems.

#### Strategy 7

Provide training to information system managers.

State education agencies should take the lead in providing training on the types of reporting and analysis that will be most useful to federal, state, local, and school-based users of facilities data.

The ability to relate information from different files or accounting systems is crucial.

#### **Linking to Other Data Systems**

More often than not, policy questions reflect multiple categories of information. For instance, determining the adequacy of facilities to meet future enrollment needs involves gathering information from two, traditionally separate, data systems—facilities and student enrollment. The ability to relate information from different files or accounting systems is crucial in constructing useful indicators. Thus linkages between facilities information and other data systems (such as finance or student scheduling) must be in place.

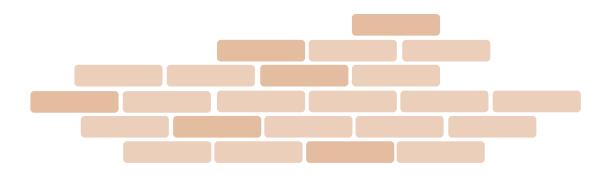
Identification codes are typically the "linkage" data elements that connect facilities information with other data systems. For example, the facilities data system may include building codes, site codes, or instructional space (room) codes. Data elements that can connect facilities and finance data systems include function codes, program codes, and subject-matter codes. Unique class codes may be used to link staff assignments to a given instructional space.

The following resources published by the National Center for Education Statistics or the National Forum on Education Statistics can help in planning a broad-based approach to the design of a facilities data system that provides linkages with related databases:

- Student Data Handbook for Elementary, Secondary, and Early Childhood Education: 2000 Edition provides a comprehensive list of data elements and their definitions that can be used to collect data about students.
- Staff Data Handbook for Elementary, Secondary, and Early Childhood Education: 2001 Edition provides a comprehensive list of data elements and their definitions that can be used to collect data about educators and other school staff.

- Financial Accounting for Local and State Systems, 1990 (revised) (also referred to as Handbook 2R<sup>2</sup>) provides a comprehensive list of the data elements and their definitions that are used in finance data collection. This handbook is being revised to comply with the current standards of the Governmental Accounting Standards Board (GASB) and should be published in Summer 2003.
- Education Systems Data Handbook (under development in 2003) will provide a comprehensive list of data elements that will address the characteristics of individual education institutions such as programs and governance.
- *Technology in Schools, 2003* defines data elements and indicators relating to the availability and uses of technology in elementary and secondary education.

The use of standard identification conventions makes it possible to link information from several data systems. This is critical since relevant databases may be controlled by different entities. To serve decision makers effectively, school facilities data systems should be linked (although they need not be housed in the same location) with other administrative record systems such as financial, student, and staff accounting systems. An information system also may be linked to the data collected and used by other functional areas within the education agency, such as research and evaluation. Linking data can provide a wealth of "added-value" information, minimize data redundancy, and enhance the capacity of an education agency to make sound policy decisions.





#### Chapter 3

# Using Data Elements for Analysis

The data elements are the building blocks upon which analysis and policy-making around school facilities rely. However, if public officials, facility managers, and planners are to make informed decisions and effectively communicate the needs of school facilities to the public, the hundreds or even thousands of data elements maintained on a district's school facilities must be translated into usable information. By "telling the story" of the inventory, condition, design, utilization, management, and funding of school facilities, measures constructed from these elements enable decision makers to evaluate whether school facilities adequately meet the educational needs of students and whether these facilities are equitably distributed throughout the district.

The measures in this chapter are syntheses of data elements that help communicate complex situations and conditions. Like data elements, the measures that are used to analyze school facilities must be unambiguous and uniformly defined. This chapter provides a more detailed explanation of a few key measures, including how they are calculated and how they are used.

#### **Condition Measures**

Statistics that describe the condition of a school facility are used by planners, architects, engineers, school facility managers, and the public to understand and compare the mechanical, structural, and environmental condition of school facilities. The two most commonly cited measures of school condition are building age and a facility condition index, which compares the cost to fix current building deficiencies with the cost to replace a building.

#### **Functional Age**

"The average age of our nation's school facilities is 40 years" is an oft-repeated truism that suggests that thousands of obsolete or run-down schools are in need of replacement or modernization. However, age alone, as defined by the year built, is a poor indicator of condition. Many of our finest civic and educational buildings are over 50 years old, and it is not uncommon to find 100-year-old schools in excellent condition and 20-year-old schools in poor condition. While the initial design and quality of construction, as well as basic maintenance over the years, contribute to the difference, more often than not, older schools that are in excellent condition have undergone a modernization program.



Functional age is an indicator used to address the imperfect correlation between the actual age of a school building, which reflects the date it was originally designed and built, and the condition of the school, which may have been altered considerably by major improvements. For a school that has never been fully modernized, functional age is measured from the year it was built; for a school that has undergone a full modernization, functional age is measured from the date of the most recent modernization. A full school modernization is when all major building systems and components have been replaced or upgraded to like new and the school has been modified, if appropriate, to support current educational programs and practice.<sup>8</sup>

#### **Facility Condition Index**

The Facility Condition Index (FCI) is a standard tool used by architects, engineers, and facility planners to compare the condition of school facilities and determine whether it is more economical to fully modernize an existing school or to replace it. This is a nationally recognized standard that has been adopted by the National Association of College and University Business Officers (www.nacubo.org) and the Association of Higher Education Facilities Officers (www.appa.org). The index is computed as a ratio of the total cost to remedy identified deficiencies to the current replacement value of the building as illustrated in Formula 1.

The Facility Condition Index is a valuable tool for comparing the condition of schools.

#### Formula 1

#### **Facility Condition Index**

Facility Condition Index (FCI) = Cost to Correct Deficiencies

Current Facility Replacement Value

For example, if the cost to fully modernize a school is estimated to be \$8 million and the cost to replace the school is \$12 million, then the Facility Condition Index is .66. If the FCI of a school is greater than 1, it may be more cost-effective to replace it rather than modernize it.

The FCI is a valuable tool for comparing the condition of schools provided the replacement value is calculated in the same way for each building and the deficiency estimates are done using comparable standards. Estimates of costs to correct deficiencies and of replacement value are very susceptible to manipulation by architects, planners, contractors, and facility managers. If there is a desire to replace a school, the replacement value can easily be underestimated and the cost to correct deficiencies can be overestimated.

In order to calculate the FCI, it is first necessary to identify a building's deficiencies. The three major types of building deficiencies are life-cycle, maintenance, and site deficiencies.

#### Life-Cycle Deficiencies

A life-cycle deficiency exists when a system, component, finish, fixture, or piece of installed equipment is in use beyond the recommended life of the item, as established by the manufacturer or school district standards. A life-cycle deficiency is recognized even though the system or equipment may still be functioning effectively. For example, until recently, some New York City Public Schools were heated by coal-fired boilers that had far exceeded their recommended life.

#### Maintenance Deficiencies

A maintenance deficiency, usually referred to as "deferred maintenance," exists when a system, component, fixture, or piece of equipment is nonfunctional or operates at less than optimal levels. The equipment may require minor maintenance, more extensive repair, or replacement. The age of the equipment—that is, whether it has exceeded its recommended life cycle—is not a consideration in determining deferred maintenance.

#### Site Deficiencies

Deficiencies in school sites include both "natural" deficiencies and those resulting from problems with site design or condition. Examples of *natural* site deficiencies include inadequate size, the presence of wetlands or rocky terrain, radon or other naturally occurring chemical pollutants, and inability to perk. Site *design* deficiencies might include inadequate parking, no student drop-off area, a poor approach to the front entrance, no city sewer or water hookups, and lack of road access. Examples of site *condition* deficiencies would be fencing, retaining walls, sidewalks, or blacktop in poor condition.

#### **Calculation of Cost to Correct Deficiencies**

Although the condition of equipment and facilities is typically measured in terms of "good, fair, and poor," aggregating these measurements would require a complex (and highly subjective) weighting formula. To alleviate this difficulty, the standard used to measure facility condition is the price to repair the faulty equipment or site. Thus the cost to correct deficiencies (the numerator of the Facility Condition Index equation) equals the estimated total costs to repair all life-cycle, maintenance, and design deficiencies.

#### Calculation of Replacement Value

Replacement value (the denominator in the FCI equation) is the cost to replace an existing structure with a new structure of the same size at the same location. Interior design and construction materials of the existing and proposed buildings may be different. The replacement value is calculated as in Formula 2.

#### Formula 2

#### Replacement Value

Replacement Value Gross square footage of existing building

X Estimated cost/square foot to design and build a new school

The standard used to measure facility condition is the price to repair the faulty equipment or site.

Design indicators do not address the facility condition, but rather the size, type, and location of spaces in schools.

#### **Design Measures**

Building design determines the ability of a school building to accommodate the educational, administrative, support, and nonschool or community activities and programs provided by the school. It is described here, but is not amenable to simple calculation formulas. Design indicators do not address the facility condition, but rather the size, type, and location of spaces in schools. To determine whether a building is designed to support a school's educational program requires space standards, which may be set by a state agency or developed at the district level. For example, the Council of Education Facility Planners International (CEFPI) has a set of K-12 facility standards that provide a somewhat standardized framework for types of spaces and space sizes in a school. (Chapter 5 includes web addresses for CEFPI and other resource organizations.)

Before building space standards can be developed, the programmatic and instructional elements of a school need to be defined. Some examples of program factors that affect facility design include the presence of early childhood programs, scheduling decisions at the high school level, the level of integration of English as a second language (ESL) programs, the extent of career and vocational educational programs, and the use of technology in instruction. Once the programmatic and instructional requirements are defined, a comparative analysis can be done of the size and nature of the spaces available and the school facility space or design standards.

A design deficiency exists when a building, regardless of its condition, is unable to meet the space or operational standards of the state or school district without modifying or adding space. Examples of design deficiencies include the following:

- inappropriate building size—a school may be too big (or too small) for its educational program or enrollment;
- inability to accommodate persons with physical disabilities;
- lack of specialized instructional areas for programs such as early childhood education, science, career/vocational education, art, music, or physical education;
- lack of common spaces to accommodate large groups such as a gymnasium, auditorium, cafeteria, or multipurpose room;
- inability to use or integrate technology into administration or instruction due to a lack of supporting infrastructure; and
- inability to apply modern security technology.

#### **Utilization Measures**

One of the primary responsibilities of a school district is to "house" students. If enrollments are growing, school districts need to plan for construction of new schools or additions to existing schools. If enrollments are shrinking, school districts need to reduce their school inventory, consolidate programs, lease out unused space, or close schools. Before policy makers can determine whether a school district needs to build (or close) schools, they need information on how schools are being utilized.

Finding out how a school is being used requires a room-by-room survey that reports how each room or space is used and the hours it is used. Such a survey may reveal that support spaces have been turned into classrooms, or that classrooms have been turned into support spaces. For example, perhaps an elementary school library is being used by a nonschool agency, occupying space originally intended for students.

#### School Utilization Rate

A school utilization rate gives facility planners, public officials, and the public a way to understand the extent to which buildings are used by comparing actual student enrollment to enrollment capacity of the school. If a school has a capacity of 450, and 500 students are enrolled, the utilization rate is 111 percent. Formula 3 illustrates the calculation of the School Utilization Rate.

#### Formula 3

#### **School Utilization Rate**

Actual School Utilization Rate = Student Enrollment
Enrollment Capacity X 100%

#### **Enrollment Capacity**

Since school utilization rates are used to determine overcrowding and under-utilization, it is important to understand the term *enrollment capacity*. It describes the maximum number of students that a school building can satisfactorily accommodate at one time for the particular educational program and curriculum offered. Typically, enrollment capacity is guided by state law, teacher contracts, and the classroom assignments of the principal. Factors that determine enrollment capacity are the number of classrooms in a school and the number of students who can be assigned to each classroom. The number of students assignable to a classroom varies by grade level and by the type of instruction being offered. For example, high school classrooms typically are designed to accommodate more students than elementary school classrooms. Also, fewer students would be assigned to a science lab than to a social studies class.

Enrollment capacity is also calculated differently in different types of schools. In a high school, both basic classrooms and specialty instructional spaces (such as art or music rooms) are counted toward capacity because regular classrooms are not left unoccupied while students get art or music instruction. Thus the formula for determining secondary school capacity is the sum of capacity for each type and number of classrooms multiplied by an optional utilization rate, which may range from 75 percent to 90 percent. An optional utilization rate recognizes the impossibility of scheduling classes so as to fully utilize every classroom every period. For example, an advanced science classroom may be able to accommodate 20 students, but there may be only 16 students in the 5th period class. Even if some other classes are over-capacity, the actual school utilization rate is never over 100 percent.

Enrollment capacity for a secondary school is calculated as the sum of the standard class size assigned to each type of classroom in the school times the number of classrooms of this type. Thus the capacity of two identical school buildings could be different if they offer different types of programs or are subject to differ-

Enrollment capacity is also calculated differently in different types of schools.

ent capacity limitations set by state law or teacher contracts. The calculation of secondary school capacity is illustrated by Formula 4.

#### Formula 4

#### Secondary School Enrollment Capacity

Secondary
School Capacity

Sum of (Number of all classrooms X Students assignable to each type of classroom) X Optional utilization rate

In an elementary school, specialty instructional spaces are not counted in the calculation of capacity space since regular classrooms remain empty while classes are receiving instruction in the art room or music room. Enrollment capacity then is based on the standard class size assignable to each type of basic classroom in the school (for example, a prekindergarten room will have fewer students assignable to it than a 6th grade classroom, regardless of the rooms' actual sizes), not counting specialized classrooms. Moreover, a utilization rate is not applied. The calculation of enrollment capacity for an elementary school is illustrated by Formula 5.

#### Formula 5

#### **Elementary School Enrollment Capacity**

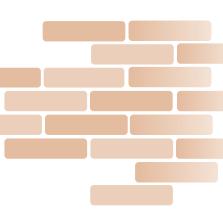
Elementary
School Capacity

Sum of (Number of basic classrooms X Students assignable to each type of classroom)

Instructional spaces that generate capacity for enrollment are considered capacity space while all other rooms and spaces within a school building are considered noncapacity, or unassigned, space. Even though noncapacity space—including hallways, stairwells, cafeterias, playgrounds, parking lots, teacher work areas, storage rooms, restrooms, etc.—is not considered in the determination of enrollment capacity, it cannot be ignored when determining the adequacy of a facility. For example, the sizes of the existing cafeteria and hallways need to be considered when adding a wing with new classroom space.

#### **Density Factor**

Density factors are another way of comparing schools for overcrowding or underutilization. While utilization rates compare enrollment capacity to actual enrollment, the density factor compares the standard gross square feet of building space per student, as established by an educational specification space standard, to the actual amount of gross square feet of building space per student. There are no universal standards for how much space should be allotted for each student in a school. Rather, space standards vary according to the instructional program, school design, grade levels, and budget. The density factor is calculated as in Formula 6.



#### Formula 6

#### **Density Factor**

Density Factor = Standard Gross Square Feet per Student

Actual Gross Square Feet per Student

If school district or state department of education guidelines indicate that a standard elementary school facility requires 115 gross square feet per student, an elementary school with 78 gross square feet of space per student has a density factor of 1.47. Another elementary school of the same size with fewer students, resulting in 140 gross square feet per student, would have a density factor of .82. A density factor of 1 indicates that a school has the density recommended in the guidelines.

Unassigned space that is not reflected in the calculation of enrollment capacity is counted when calculating the density factor. For example, one school may have 12 classrooms (each of which can accommodate 25 students), a lunchroom, and a main office adding up to a school capacity of 300 students. Another school has 12 classrooms of the same size (with 25 students assigned to each classroom), but also has a music room, art room, library, parent resource center, and main office. Both schools have an enrollment capacity of 300, but the second school would be less crowded and would have a lower density factor.

#### Calculation of Gross Square Feet per Student

A key measure in determining a school's density factor is the gross square feet per student (GSF/student). This is the total square footage of the school—including all instructional and noninstructional interior spaces—divided by the number of students enrolled at the school. The only spaces not included in this calculation are those used by nonschool programs, such as a community health clinic or offices for central administration staff. The calculation of GSF per student is shown as Formula 7

#### Formula 7

#### **Gross Square Feet per Student**

Gross Square Feet per Student = Gross Square Footage of Building
Student Enrollment

The GSF/student measure is particularly useful when more detailed or reliable capacity information is unavailable. School districts usually know the gross size of a school and always have the current student enrollment. However, a shortcoming with this measure is that schools of the same size vary tremendously in design. A school built with an open-plan design and a school with the double-loaded corridors, small classrooms, and few support spaces that were typical of the 1950s could have the same gross square footage and the same enrollment, but one could feel crowded and the other one not because of how differently their space is used.

Instructional space is all space where there is direct instructional contact between a student and a teacher.

#### Net Square Feet per Student

Some of the problems of comparing school density using gross square footage are avoided by using the net square footage (NSF) of instructional space. Instructional space is all space where there is direct instructional contact between a student and a teacher. It includes certain types of noncapacity, or unassigned spaces, such as elementary school art and music rooms, libraries, and student project rooms. The calculation of NSF per student is shown in Formula 8.

#### Formula 8

#### Net Square Feet per Student

Net Square Feet per Student = Net Square Footage of Instructional Space

Student Enrollment

#### **Funding Measures**

Operating expenditures and capital expenditures per student are often used to measure the sufficiency of a district's resources and the fairness of their distribution. School systems make facility expenditures from both their operating and capital budgets. The operating budget typically pays for cleaning, maintenance of school buildings and grounds, and minor repairs. The capital budget covers major facility improvements, design, and construction expenditures. Capital funds are usually borrowed, whereas operating funds come from taxes and state and federal allocations. It is useful to consider operating and capital budget expenditures separately when evaluating a district's facilities funding. The formulas to measure these expenditure levels are shown in Formulas 8 through 10.

#### Formula 8a

#### Maintenance and Repair Expenditure per Student

Maintenance and Repair = Expenditure per Student

Total Operating Expenditures for Maintenance and Repairs in Local School(s)

Student Enrollment

#### Formula 8b

#### Maintenance and Repair Expenditure per Square Foot

Maintenance and Repair
Expenditure per Square Foot = Total Operating Expenditures for Maintenance and Repairs in Local School(s)

Gross Square Footage of Building(s)

#### Formula 9a

#### **Utility Expenditure per Student**

Utility Expenditure per Student = Total Utility Expenditures in Local School(s)

Student Enrollment

#### Formula 9b

#### **Utility Expenditure per Square Foot**

Utility Expenditure per Square Foot = Total Utility Expenditures in Local School(s)

Gross Square Footage of Building(s)

#### Formula 10a

#### Capital Expenditure per Student

Capital Expenditure per Student = Total Capital Expenditures in Local School(s)

Student Enrollment

#### Formula 10b

#### Capital Expenditure per Square Foot

Capital Expenditure per Square Foot =  $\frac{\text{Total Capital Expenditures in Local School(s)}}{\text{Gross Square Footage of Building(s)}}$ 

Measures of expenditures should always be looked at both on a per-square-foot basis and on a per-student basis. In a relational database, costs can be compiled and analyzed for the state, a school district, a region within the district, by type of school (elementary, middle, secondary), and for individual schools. This has become particularly important in light of ongoing court challenges to perceived inequities in school funding.

The following chapter provides definitions for the data elements used to construct indicators of facility condition, design, utilization, management, and funding.

<sup>&</sup>lt;sup>6</sup> Laurie Lewis, Kyle Snow, Elizabeth Farris, Becky Smerdon, Stephanie Cronen, Jessica Kaplan, *Condition of America's Public School Facilities: 1999* (NCES 2000-032) (Washington, DC: U.S. Department of Education, 2000).

<sup>&</sup>lt;sup>7</sup> Op. Cit.



#### Chapter 4

## **Facility Data Elements**

This chapter contains a basic list of relevant data elements, with unique identifying numbers, definitions, and where appropriate, illustrative or complete sets of data element options that further define the more general data element. This chapter is divided into seven sections:

**Facilities Identification** 

**Facilities Condition** 

**Facilities Design** 

**Facilities Utilization** 

**Facilities Management** 

**Facilities Budget and Finance** 

**Data Elements Index** 

Within each section, the data elements are ordered according to a logic associated with content. The numbers were assigned for purposes of this publication, and will likely change when a database is created from these data elements or when this document changes.

#### 1000 Facilities Identification

These data elements can be used to identify and inventory an education institution and include relevant information regarding the name, location, age, and size of a given facility.

Number Data Element and Definition

#### 1010 Name of Institution

The full, legally accepted or popularly accepted name of an organization (e.g., a school, an association, or a company).

#### 1020 Institution Identification Code

A unique number or alphanumeric code assigned to an organization or institution by a school, school system, state, or other agency or entity.

#### 1030 Street Number/Name

The street number and street name or post office box number of an address.



#### Number Data Element and Definition

#### 1040 Apartment/Room/Suite Number

The apartment, room, or suite number of an address.

#### 1050 Building/Site Number

The number of the building on the site, if more than one building shares the same address.

#### 1060 City

The name of the city in which an address is located.

#### 1070 Name of County

The name of the county, parish, borough, or other comparable unit (within a state) in which an address is located.

#### 1080 State Abbreviation

The abbreviation for the state (within the United States) or outlying area in which an address is located.

#### 1090 Zip Code

The five- or nine-digit ZIP Code portion of an address.

#### 1100 Country Code

The code for the country in which an address is located.

#### 1120 GIS Location

The unique geocoded designation of a building or site.

#### 1130 Site Identifier

The lot and square number, or equivalent unique municipal number identification, of a parcel of land.

#### 1140 Census Tract

The census tract number of the school site.

#### 1150 Block Number Area (BNA)

The informal description of location sometimes used in rural areas, for example, "from the highway to the railroad tracks."

#### 1160 School District Subdivision

The number, letter, or name that describes an organizational subdivision of a school district.

#### 1170 Building Name

The full, legally accepted or popularly accepted name of a building.

#### 1180 Building Identification Code

A unique number or alphanumeric code assigned to a building by a school, school system, state, or other agency or entity.

#### 1190 **Authorizing Entity Type**

The type of organization that has ultimate responsibility for policy and operational decisions for an educational institution.

- 1 Federal (e.g., Congress, Bureau of Indian Affairs, Department of Defense, U.S. Department of Education)
- 2 State/Territory (e.g., State Education Agency, Health and Human Services, Corrections, State Board of Education, State Legislature)
- 3 Regional (e.g., Intermediate Education Agency, Cooperative, BOCES, Crossstate agency)
- 4 Local (e.g., School Board, City Council)
- 5 School
- 6 Private/Religious (e.g., Catholic diocese, private school board, charter)

#### **Authorizing Entity Name** 1195

The name of the organization that has ultimate responsibility for policy and operational decisions for an educational institution.

#### **Ownership Entity Type** 1200

The public or private entity that holds legal title to the building and/or site.

- 1 Federal (e.g., Congress, Bureau of Indian Affairs, Department of Defense, U.S. Department of Education)
- 2 State/Territory (e.g., State Education Agency, Health and Human Services, Corrections, State Board of Education, State Legislature)
- 3 Regional (e.g., Intermediate Education Agency, Cooperative, BOCES, Crossstate agency)
- 4 Local (e.g., School Board, City Council)
- 5 School
- 6 Private/Religious (e.g., Catholic diocese, private school board, charter)

#### 1205 **Ownership Entity Name**

The name of the public or private entity that holds legal title to the building and/or site.

#### **Year Built** 1210

The year a building was constructed, as indicated by cornerstone or official government records.

#### **Historic Status** 1220

An indication of whether or not a building is eligible to be declared a landmark or historic building.

- 1 Locally eligible, not yet designated
- 2 State eligible, not yet designated
- 3 Nationally eligible, not yet designated



- 4 Ineligible
- 5 Not evaluated
- 6 Locally designated
- 7 State designated
- 8 Nationally designated

### 1230 Construction Date

The month and year in which construction of a building, addition, or improvement was completed.

# 1240 Construction Date Type

Designation of the nature of the construction completion date.

1 Actual

Construction was completed as judged by the owner putting the building or improvement into use.

2 Estimated

The new building, addition, or improvement is expected to be completed so the owner is able to put the building or improvement into use.

# 1250 Construction Material Type

The primary material used for the construction of a building.

- 1 Brick
- 2 Brick veneer
- 3 Block
- 4 Wood frame
- 5 Concrete
- 6 Prefabricated
- 7 Aluminum
- 8 Steel
- 9 Adobe
- 99 Other

### 1260 Date of Certificate of Occupancy

The month, day, and year in which a certificate of occupancy was granted by the appropriate local authority.

# 1270 Number of Stories

The number of stories in a building, excluding the basement if its ceiling is less than three feet above ground level.

### 1280 Year of Last Modernization

The most recent year in which a full school modernization was completed.

# 1290 Building Addition Code

A unique number or alphanumeric code assigned to a building addition by a school, school system, state, or other agency or entity.

# 1300 Building Addition

A description of the permanent structure added to the original building.

# 1310 Building Permanency

An indication of whether the building is built for permanent use in the same location or is relocatable.

- 1 Permanent building
  - A structure built with a fixed foundation that has permanently attached walls, roof, and floor that cannot be transported either as a unit or in sections.
- 2 Nonpermanent building

A building or portion of a building made up of prefabricated units that may be disassembled and reassembled and transported to another location, or transported without reassembling.

### 1320 Building Area

The sum of the areas at each floor level included within the principal outside faces of exterior walls, including roofed areas with finished floors that may not have exterior walls, but are connected to the main building. This sum should include all stories or areas having floor surfaces with clear standing head room (6.5 feet or 1.98 meters) but omit architectural setbacks or projections.

### 1330 Site Name

The full, legally accepted or popularly accepted name of a site.

### 1340 Site Identification Code

A unique number or alphanumeric code assigned to a site by a school, school system, state, or other agency or entity.

### 1350 Site Improvement Location

The location of the designed and constructed improvements made to a site.

- 1 Playground
- 2 Athletic field
- 3 Outdoor classroom
- 4 Hard-surface play area
- 5 Hard-surface game area
- 6 Parking
- 7 Drop-off/driveway
- 8 Septic fields
- 9 Retaining walls
- 10 Fencing
- 11 Sidewalks



- 12 Stairs and ramps
- 13 Landscaping
- 14 Water filtration system
- 99 Other

# 1360 Site Improvement Description

A description of the designed and constructed improvements made to a site.

### 1370 Site Area

The total number of acres in a continuous piece of land, to the nearest tenth, including undeveloped areas as well as areas occupied by buildings, walks, drives, parking facilities, and other improvements.

## 1380 Site Descriptors

A characterization of a site that would define restrictions or opportunities.

- 1 Land use
  - The underlying municipal zoning regulation which guides the potential development of a site.
- 2 Enterprise zone
  - The government identification for special funding opportunities based on income of residents of the area.
- 3 Historic district
  - The school is located in a publicly designated historic district, whether or not the school itself is historic.
- 4 Environmental protection
  - All or a portion of the site is protected under any environmental restrictions for development, such as wetlands.
- 5 Environmental contamination
  - All or a portion of the site is subject to any environmental contamination such as oil or toxic soil conditions.
- 6 Site easements
  - The covenants legally attached to a site, including agreements allowing other parties to use the site and agreements allowing the LEA to use sites belonging to others.
- 99 Other

# 2000 Facilities Condition

These data elements can be used to determine the safety and condition of a facility, including the service systems in place to maintain and regulate its overall physical site.

Number Data Element and Definition

### 2000 System Type

The type of system that is installed in the building or site.

- 1 Plumbing System
- 2 Electrical System
- 3 Heating Distribution System
- 4 Cooling System
- 5 Ventilation System
- 6 Communications Management
- 7 Technology Wiring
- 8 Security System
- 9 Fire Protection
- 10 Mechanical System
- 11 Vertical Transportation

# 2010 System Identification Code

A unique number or alphanumeric code assigned to a building system or site system by a school, school system, state, or other agency or entity.

# 2020 Component Identification Code

A unique number or alphanumeric code assigned to a component by a school, school system, state, or other agency or entity.

# 2030 Plumbing System

The component of an on-site system for supplying, eliminating, and treating water.

- 1 Water supply
- 2 Drains
- 3 Vents
- 4 Sewage treatment
- 5 Water source
- 6 Parcel drainage
- 7 Piping
- 8 Water softeners
- 9 Detention ponds
- 10 Filtration system
- 99 Other



# 2040 Electrical System

The type of system that collects and distributes electricity throughout the building or site.

- 1 Electrical supply
- 2 Electrical distribution
- 3 Emergency generator
- 4 Electrical interface
- 5 Circuit breakers
- 99 Other

# 2050 Heating Distribution System

The method by which the heat is distributed and delivered throughout the room(s) or building.

- 1 Steam radiator
- 2 Hot water radiator
- 3 Heat pump
- 4 Unit ventilators
- 5 Unit heaters/baseboard heaters
- 6 Central ducted system
- 7 Open plenum system
- 8 Forced air
- 9 Displacement ventilation
- 99 Other

# 2060 Cooling System

The type of system used for cooling.

- 1 Central cooling system
- 2 Local zone cooling system
- 3 Individual (room) unit cooling system
- 4 Combination cooling systems
- 5 Ceiling fans or ventilation fans
- 6 Natural systems
- 7 None
- 99 Other

# 2070 Ventilation System

The primary means by which air is circulated, freshened, and exhausted.

- 1 Window ventilation
- 2 Gravity ventilation
- 3 Mechanical exhaust
- 4 Mechanical supply
- 5 Both mechanical exhaust and supply
- 6 Air handler units
- 99 Other

# 2080 Communications Management Component System

The types of system, interface, and management components for carrying voice, video, and data throughout a building.

- 1 Voice
- 2 Video
- 3 Data
- 4 Public Address System
- 99 Other

# 2090 Technology Wiring System

The means through which voice, video, audio, and data information are conveyed.

- 1 Wire cable
- 2 Fiber optic cable
- 3 Coaxial cable
- 4 Wireless
- 5 Twisted pair
- 99 Other

# 2100 Security System

The type of system that protects the facility from intrusion.

- 1 Video
- 2 Intrusion detection system
- 3 Card access control system
- 4 Keypad access control system
- 5 Metal detector
- 99 Other



# 2110 Fire Protection System

The type of system that protects the facility against fire.

- 1 Automatic sprinkler
- 2 Fire pump/extinguishers
- 3 Alarms
- 4 Kitchen fire suppressor system
- 99 Other

# 2120 Mechanical System

The major manufactured systems required to operate a building.

- 1 Cooling
- 2 Heating
- 3 Ventilation
- 99 Other

# 2130 Vertical Transportation System

The type of system used to convey persons or freight between floors.

- 1 Stairs
- 2 Elevator
- 3 Escalator
- 4 Other

# 2140 Window Design Type

The type of window design, defined by how it operates.

- 1 Nonoperable
- 2 Casement
- 3 Double hung
- 4 Tilt open (awning or hopper)
- 5 Sliding
- 99 Other

### 2150 Window Frame Material

The building material used to construct window frames.

- 1 Wood
- 2 Aluminum
- 3 Vinyl
- 4 Steel
- 5 Vinyl-clad wood
- 6 Vinyl-clad steel

- 7 Aluminum-clad wood
- 99 Other

# 2160 Roof Type

The design or structure of roof.

- 1 Metal
- 2 Slate
- 3 Asphalt shingle
- 4 Built-up
- 5 Single-ply
- 6 Terra cotta tile
- 7 Membrane
- 99 Other

# 2170 Exterior Finish Type

The covering, structural or not, of the exterior building walls.

- 1 Brick
- 2 Concrete masonry unit
- 3 Stucco
- 4 Synthetic stucco
- 5 Wood
- 6 Adobe
- 7 Stone
- 8 Prefabricated concrete
- 9 Synthetic stone
- 99 Other

# 2180 Interior Finish Type

The type of covering, structural or not, of the interior walls, ceilings, and floors.

- 1 Painted gypsum board
- 2 Painted plaster
- 3 Painted concrete masonry unit
- 4 Glazed concrete masonry unit
- 5 Glazed brick or tile
- 6 Vinyl wall covering
- 7 Wood flooring
- 8 Synthetic sheetgood composite tile flooring



# Section 2000

### Number Data Element and Definition

- 9 Carpet
- 10 Terrazzo flooring
- 11 Vinyl asbestos tile (VAT)
- 12 Quarry tile
- 13 Sealed concrete
- 14 Acoustical tile
- 15 Exposed structure—painted
- 16 Ceramic tile
- 99 Other

### 2190 Installation Date

The year in which the system, component, equipment, or fixture was originally installed.

# 2200 Condition of System or Component

The rating of the system or component functions under the demands of its regular operation.

1 Excellent

New or easily restorable to "like new" condition; only minimal routine maintenance is required.

- 2 GoodOnly routine maintenance or minor repair is required.
- 3 Adequate
  Some preventive maintenance and/or corrective repair is required.
- 4 Fair
  Sometimes fails to meet code or functional requirements; failure(s) are inconvenient to school operation.
- 5 Poor

Consistently substandard performance; failure(s) are disruptive and costly; fails most code and functional requirements; requires constant attention, renovation, or replacement. Major corrective repair or overhaul is required.

6 Nonoperable

The system or component exists in a significantly substandard level and cannot be used or operated. Replacement is required.

7 Urgent building condition

A condition that will seriously affect the safety, environment, and/or educational mission, or could result in possible damage to the facility or inhabitants.

8 Emergency condition
A condition that will result in injury, loss of life, or major damage.

# 2210 Component Deficiency

A description of the component, system, or finish that needs replacement, repair, or maintenance to perform at an optimal level.

# 2220 Compliance Status

An indication of whether the building, site, system, component, equipment, or fixture conforms with the requirements or standards specified in federal, state, or local standards or codes.

- 1 In compliance
- 2 Not in compliance
- 3 Planned compliance
- 4 Waived compliance

### 2230 Compliance Determination Date

The month, day, and year that the building, site, system, component, equipment, or fixture compliance status was determined.

### 2240 Next Service Date

The month, day, and year a major component, system, equipment, or fixture is scheduled to be serviced for preventive or routine maintenance.

### 2250 Useful Life

The anticipated time (in years) from the time of installation or service that a properly maintained system, component, equipment, or fixture is expected to operate effectively and efficiently.

### 2260 Last Check Date

The month, day, and year that the condition of a system, component, equipment, or fixture was last checked.

### 2270 Last Service Date

The month, day, and year a system, component, equipment, or fixture was last serviced for repair or routine maintenance.

# 2280 Federal Mandate Interest

The area of interest controlled by a federal law, regulation, or standard that pertains to a school facility.

- 1 Facility accessibility and usability for individuals with disabilities
- 2 Indoor air quality
- 3 Radon contamination
- 4 Drinking water safety
- 5 Lead contamination
- 6 Asbestos contamination
- 7 Hazardous materials
- 8 Underground storage tank





- 9 Material Safety Data Sheet (MSDS)
- 10 Integrated pest control
- 99 Other

# 2285 Federal Mandate Name

- 1 Americans with Disabilities Act (ADA)
- 2 Individuals with Disabilities Education Act (IDEA)
- 3 Safe Drinking Water Act
- 4 Lead Contamination Control Act
- 5 Asbestos Hazardous Emergency Response Act (AHERA)
- 99 Other

### 2290 State or Local Mandate Interest

The area of interest controlled by a law, rule, regulation, or standard of state and local governments that pertains to public school facilities.

- 1 Building code
- 2 Fire code
- 3 Health code
- 4 Flood control
- 5 Design standards
- 6 Acreage standards
- 7 Standard educational specifications
- 8 Historic preservation requirements
- 9 Occupational health and safety code
- 10 Earthquake standards
- 99 Other

# 2295 State or Local Mandate Name

The specific law, rule, regulation, or standard of a state or local government that pertains to public school facilities.

# 3000 Facilities Design

This category contains data elements that can be used to assess whether a facility's intended composition and the designated use of space meet the educational needs of its students and are designed for efficient operations and administration.

Section 3000

# Number Data Element and Definition

### 3000 Name of Architect

The name of the architect of record for the building.

### 3010 Architectural Firm

The name of the architectural firm responsible for the building design.

### 1170 Building Name

The full, legally accepted or popularly accepted name of a building.

### 1180 Building Identification Code

A unique number or alphanumeric code assigned to a building by a school, school system, state, or other agency or entity.

# 3020 School Design Type

The organization and character of a school, as defined by age groups served, educational program provided, and basic layout of the building.

- 1 Early childhood center
- 2 Elementary school
- 3 Middle school
- 4 Junior high school
- 5 Senior high school
- 6 Career-technology education center
- 7 Adult education school
- 8 Special education school
- 9 K-9 school
- 10 6-12 school
- 11 Alternative school
- 99 Other

### 3030 Building Design Type

The organization and character of a school, as defined by age groups served, educational program provided, and basic layout of building.

- 1 School Building
  - A building that houses instructional and related activities associated with the education of students.
- 2 Service Center Building

A building that houses support services to students and their families, not direct instruction.



3 Office Building

A building that houses administrative functions.

4 Warehouse Building

A building that houses the storage of materials and supplies.

5 Garage Building

A building that houses the storage and repair of vehicles.

6 Central Kitchen Building

A building designed to accommodate storage and preparation of food.

7 Stadium Building

An outdoor building designed for athletic events with large audiences.

8 Field House Building

A free-standing building designed to service athletic facilities, athletes, and athletic events.

9 Production Center Building

A building that houses support communications activities, including newspaper, radio, or television productions.

10 Natatorium

A building that houses swimming and diving activities, including supporting requirements such as lockers and changing areas.

11 Dormitory Building

A building that houses student residences.

12 Gymnasium

A free-standing building for athletic practices and events.

13 Assembly Building

A free-standing building used for large gatherings for school or agency-related activities of students, staff, and public.

99 Other

# 3040 Facility Standard

An indication of the district or state requirements or guidelines for the design and construction of school facilities.

- 1 Design guidelines
- 2 Space standards
- 3 Master construction specifications
- 4 Health and safety standards
- 5 Energy performance standards
- 6 Site guidelines
- 99 Other

# 3050 Space Design Type

The primary design or purpose of a space, as determined by its physical layout and built-in systems and equipment, regardless of its current use.

### 1 Basic classroom

A space for the activities dealing directly with the interaction between teachers and students that does not require content specialized furniture, fixtures, or equipment.

### 2 Specialty classroom

A space with special elements including furniture, fixtures, equipment, and sometimes size to support instruction in a particular content area.

### 3 Library/media

A space for reading, reference, and research in various media, including books, periodicals, and electronic communications.

### 4 Athletic

A space primarily or exclusively for physical education and athletic activities, often with specialized floor, walls, size, equipment, lighting, and auxiliary spaces.

## 5 Student support

A space for providing specialized support services to students such as health care or physical therapy.

### 6 Administration

A space primarily for conducting overall administrative and business functions of a school, building, program, or service.

### 7 Assembly

A space primarily for formal and informal gathering, where school and community related activities are conducted by students, staff, and the public.

### 8 Corridors

A space for traveling throughout the building.

### 9 Operational support

A space to support building systems and components and to operate the physical plant.

### 10 Storage

A space to provide safekeeping for materials and supplies.

### 11 Food service

A space to prepare and store food.

# 12 Dormitory room

A space specially designed for residence of students.

99 Other

# 3060 Space Identification Code

A unique number or alphanumeric code assigned to a space by a school, school system, state, or other agency or entity.





# 3070 Space Description

A description of the space, as determined by its physical layout and built-in systems and equipment.

# 3080 Basic Classroom Design Type

A classroom designed for instruction of a particular age group, but not a specific subject.

- 1 Early childhood/kindergarten classroom
  A space with built-in equipment for use by a class that is organized to provide educational experiences in the years preceding first grade.
- 2 Elementary classroom A space designed with built-in equipment for use by a class that is organized to provide educational experiences in, usually, the years first grade through sixth grade.
- 3 Secondary classroom—middle school/junior high/high school
  A space with special built-in equipment for use by a class that is organized to provide educational experiences in, usually, the years seventh grade through twelfth grade.
- 4 Resource classroom

  A space designed for general use by a group or class.
- 99 Other

# 3090 Classroom Identification Code

A unique number or alphanumeric code assigned to a room by a school, school system, state, or other agency or entity.

# 3100 Art Specialty Space Type

The space designed to support the teaching and learning of visual arts.

- 2-dimensional art classroomA space for drawing and painting.
- 3-dimensional art classroomA space for sculpture or three-dimensional art work.
- 3 Darkroom
  - A space with built-in equipment for printing and processing photographic films and papers.
- 4 Ceramic studioA space with built-in equipment for creating pottery.
- 5 Photography studio/graphic artsA space with built-in equipment for producing images.
- 6 Kiln roomA space with a built-in oven or furnace for pottery making.
- 99 Other

# 3110 Performing Arts Specialty Space Type

The space designed, located, furnished, and equipped for instruction and support of music and drama curricula and productions.

- 1 Band room
- 2 Practice room
- 3 Choral room
- 4 Drama classroom
- 5 Blackbox theater
- 6 Instrument storage
- 7 Keyboard laboratory
- 8 Television studio
- 9 Multipurpose music room
- 10 Multimedia production center
- 11 Radio/television broadcast studios
- 99 Other

# 3120 Science Specialty Space Type

The space designed, located, furnished, and equipped for instruction and experimentation in science.

- 1 Biology laboratory
- 2 Chemistry laboratory
- 3 Environmental science laboratory
- 4 Physics laboratory
- 5 Planetarium
- 6 Prep room
- 7 Science lecture room
- 8 Chemical storage room
- 9 Miscellaneous storage room
- 10 Outdoor classroom
- 11 General science laboratory
- 99 Other

# 3130 Special Education Specialty Space Type

The space designed, located, furnished, and equipped to support instruction of children with special physical, emotional, and/or educational needs.

- 1 Occupational therapy room
- 2 Speech and hearing room





- 3 Physical therapy room
- 4 IEP conference room
- 5 Itinerant staff room
- 6 Self-contained classroom
- 7 Resource classroom
- 99 Other

# 3140 Career-Technical Education Type

The classroom, laboratory, or shop specially designed to prepare students for careers and use of technology.

- 1 Computer/information technology laboratory
- 2 Consumer science—food classroom
- 3 Consumer science—clothing classroom
- 4 Family and consumer science
- 5 Automotive/avionics technology shop
- 6 Electronics/engineering technology laboratory
- 7 Drafting room/CAD/CAM
- 8 Agricultural/natural resources shop
- 9 Greenhouse
- 10 Barbering and cosmetology shop
- 11 Multimedia production studio/communications
- 12 Wood shop
- 13 Dental science classroom
- 14 Aeronautical technology classroom
- 15 Building construction technology shop
- 16 Precision manufacturing laboratory/metalworking shop
- 17 Retail store/entrepreneurship laboratory
- 18 Financial services center/bank
- 19 Food services/hospitality laboratory
- 20 Business and administrative services/office management laboratory
- 21 Health occupations laboratory
- 22 Early childhood laboratory/child care center
- 23 Graphic/digital arts and design studio
- 24 Law enforcement/fire technology/protective services laboratory
- 25 Biotechnology laboratory
- 99 Other

# 3150 Library/Media Center Specialty Space Type

The primary and auxiliary space designed to provide and support student and staff access to books, periodicals, software, videos, and the Internet.

- 1 Collections room
- 2 Reading room
- 3 Distance learning lab
- 4 Copy center
- 5 Study room
- 6 Workroom
- 99 Other

# 3160 Indoor Athletic/Physical Education Space Type

The indoor space designed, located, furnished, and equipped for instruction and support of a physical education curriculum and athletic program.

- 1 Gymnasium
- 2 Auxiliary gymnasium
- 3 Weight training room
- 4 Wrestling room
- 5 Dance studio
- 6 Team room
- 7 Pool/natatorium
- 8 Locker room
- 9 Equipment storage
- 10 Press box
- 11 Multipurpose room
- 12 Health classroom
- 13 Playtorium (auditorium/gymnasium)
- 99 Other

# 3170 Outdoor Athletic/Physical Education Space Type

The outdoor space designed, located, furnished, and equipped for instruction and support of a physical education curriculum and athletic program.

- 1 Multipurpose grassy play field
- 2 Concessions/restrooms
- 3 Field house
- 4 Track and field event elements
- 5 Bleacher seating





- 6 Tennis courts
- 7 Paved outdoor basketball courts
- 8 Fitness trail
- 9 Baseball field
- 10 Softball field
- 11 Football field
- 12 Soccer field
- 13 Other sports field
- 99 Other

### 3180 Student Support Space Type

The space designed to provide student support services such as administrative, technical (e.g., guidance and health), and logistical support to facilitate and enhance instruction.

- 1 In-school suspension room
- 2 Nurse's station
- 3 Health suite
- 4 Health room lavatory
- 5 Guidance/counseling room
- 6 Career center
- 7 College center
- 8 Internship center
- 9 Student club space
- 99 Other

# 3190 Administrative Space Type

The space designed primarily for conducting administrative and business functions.

- 1 Administrative office/room
- 2 Principal's office
- 3 Vice-principal/assistant principal's office
- 4 Clerical areas
- 5 Mail room
- 6 Conference room
- 7 Attendance reception
- 8 General reception
- 9 Security/police/probation office
- 10 Staff lounge

- 11 Staff work room
- 12 School store
- 13 School bank
- 14 PTO/PTA spaces
- 15 Site-based council office
- 16 Records room/vault
- 17 Storage—textbook
- 18 Storage—resource materials
- 19 Storage—instructional equipment
- 99 Other

# 3200 Community Use Space Type

The space designed primarily for community or shared use.

- 1 Before- and after-school office
- 2 Child care and development space
- 3 Health clinic
- 4 Head Start space
- 5 Parent room
- 6 Before- and after-school care
- 7 Community room
- 8 Full-service health clinic
- 9 Family resource center
- 99 Other

# 3210 Assembly Space Types

An area designed primarily for theater productions, assemblies, and other large gatherings.

- 1 Auditorium (fixed seats)
  A space with a stage and audience seating to accommodate performing arts or other activities for a large audience.
- 2 Control room
  A space adjacent to the auditorium and equipped with a viewing area and built-in projection equipment.
- 3 Disaster shelter
  A space that provides temporary shelter for individuals whose residences have been made uninhabitable by fire, flood, earthquake, or other major disaster.
- 4 Costume storageA space for costume storage.



- 5 Set storageA space for set storage.
- Backstage room/green roomA space for actors and actresses to use before and during performances.
- 7 Auditorium (multipurpose)
  A space with a stage and movable chairs designed for assemblies, but also usable for other purposes.
- 99 Other

# 3220 Circulation Space Type

A space designed to enable people to move within the building.

- 1 Hallway
- 2 Stairway
- 3 Lobby
- 4 Elevator
- 5 Escalator
- 99 Other

# 3230 Operations/Maintenance Space Type

The area designed primarily for conducting activities concerned with maintaining the grounds, buildings, and equipment.

- 1 Custodian office
- 2 Custodial closet
- 3 Mechanical room
- 4 Boiler room
- 5 Fan room
- 6 Systems control room
- 7 Electrical closet
- 8 Communications closet
- 9 Server room
- 10 Storage—flammable materials
- 11 Storage—maintenance equipment
- 12 Storage—hazardous materials
- 13 Student toilet
- 14 Public toilet
- 15 Staff toilet
- 99 Other

# 3240 Food Service Space Type

The space designed primarily for preparing and serving food.

- 1 Cafeteria
  - A space equipped primarily for the preparation, serving, and eating of food.
- 2 Cafetorium
  - A space for the combined functions of a cafeteria and auditorium.
- 3 Faculty dining room
  - A space for teacher and staff dining.
- 4 Student dining room
  - A space for student dining.
- 5 Multipurpose room
  - A space for food service, physical education, and school assembly.
- 6 Full-service kitchen
  - A space for a full-service commercial kitchen for preparation of food for student lunches or breakfast programs.
- 7 Convenience kitchen
  - A space for a small noncommercial kitchen, such as found in a teacher's lounge or early childhood area.
- 8 Warming kitchen
  - A commercial kitchen to warm and refrigerate prepared food for student lunches or breakfast programs.
- 9 Dry food storage area
  - A storage area for dry, nonperishable food.
- 10 Food serving area
  - A space for serving food.
- 11 Storage of tables and chairs
  - A space for storing cafeteria tables and chairs.
- 99 Other



# Section 4000

# 4000 Facilities Utilization

These data elements can be used to describe the principal use of space within a building regardless of its intended purpose and designated capacity.

Number Data Element and Definition

# 4000 Current Building Use Type

How a building is principally used, regardless of its original design.

- 1 Operations building
  - A building that houses activities required to maintain and operate the buildings, grounds, and equipment of an education agency or school.
- 2 School building
  - A building that houses the instructional and related activities associated with education of students.
- 3 Service center building
  - A building that houses support services to students and their families, not direct instruction.
- 4 Office building
  - A building that houses administrative functions.
- 5 Warehouse building
  - A building that houses storage of materials and supplies.
- 6 Garage building
  - A building that houses storage and repair of vehicles.
- 7 Central kitchen building
  - A building that houses food preparation.
- 8 Stadium building
  - An outdoor building that houses athletic events with large audiences.
- 9 Field house building
  - A free-standing building designed to service athletic facilities, athletes, and athletic events.
- 10 Production center building
  - A building that houses communications activities, including newspaper, radio, or television production.
- 11 Natatorium
  - A building that houses swimming and diving, including support requirements such as lockers and changing areas.
- 12 Dormitory
  - A building that houses student residences.
- 13 Chapel building
  - A building that houses student religious observances.
- 14 Gymnasium building
  - A free-standing athletic building that houses athletic practices and events.

- 15 Assembly building
  - A free-standing building used for large gatherings for school or agency-related activities of students, staff, and the public.
- 16 Investment
  - A building not being used by the local education agency (LEA) that is held for investment purposes.
- 17 Not in use
  - Facility that is not being used by the LEA or any other education agency or community organization and not being held for investment purposes.
- 18 Holding school
  Facility reserved for temporary use to house students when their home school is uninhabitable, such as during renovations.
- 99 Other

# 1170 Building Name

The full, legally accepted or popularly accepted name of a building.

### 1180 Building Identification Code

A unique number of alphanumeric code assigned to a building by a school, school system, state, or other agency or entity.

### 4010 School Use Type

How a building is used for education, regardless of its intent or original design.

- 1 Early childhood center
- 2 Elementary school
- 3 Middle school
- 4 Junior high school
- 5 Senior high school
- 6 Combination grades
- 7 Special education
- 8 Career-technical education
- 9 Adult education
- 10 Alternative school
- 11 Upper elementary school





# 4020 Space Use Type

The primary use of a space, as determined by its physical layout and built-in systems and equipment, regardless of its original design.

### 1 Basic classroom

A space for the activities dealing directly with the interaction between teachers and students that do not require content specialized furniture, fixtures, or equipment.

### 2 Specialty classroom

A space with special elements including furniture, fixtures, equipment, and sometimes size to support instruction in a particular content area.

### 3 Library/media

A space for reading, reference, and research in various media, including books, periodicals, and electronic communications.

### 4 Athletic

A space primarily or exclusively for physical education and athletic activities, often with specialized floor, walls, size, equipment, lighting, and auxiliary spaces.

### 5 Student support

A space for providing specialized support services to students such as health care or physical therapy.

### 6 Administration

A space primarily for conducting overall administrative and business functions of a school, building, program, or service.

### 7 Assembly

A space primarily for formal and informal gathering, where school and community related activities are conducted by students, staff, and the public.

### 8 Corridors

A space for traveling throughout the building.

### 9 Operational support

A space to support building systems and components and to operate the physical plant.

### 10 Storage

A space to provide safekeeping for materials and supplies.

### 11 Food service

A space to prepare and store food.

### 12 Dormitory room

A space specially designed for residence of students.

### 99 Other

# 3060 Space Identification Code

A unique number or alphanumeric code assigned to a space by a school, school system, state, or other agency or entity.

# 3070 Space Description

A description of the space, as determined by its physical layout and built-in systems and equipment.

### **4030 Instructional Space Factor**

A designation as to whether the space is considered an instructional space under state or local guidelines.

1 Instructional space

A space designed primarily or exclusively for instruction and direct instructional support, including basic and specialty classrooms, laboratories, studios, science prep rooms, library/media center spaces, indoor physical education spaces, performing art spaces, and career technology spaces.

2 Noninstructional space

Any space that is not classified as instructional, including areas designed primarily for administration and student services, and areas required for the general operation of the building (such as hallways, stairwells, custodial, mechanical, and structural space).

# **4040 Capacity Factor**

A designation as to whether the space is included in the calculation of school building capacity under state or local guidelines.

- 1 Capacity space
  - An instructional space within a school that is assigned student capacity when establishing the enrollment capacity of the school.
- 2 Noncapacity space
  - An instructional space within a school that is not assigned student capacity when establishing the enrollment capacity of the school.

### **4050** Assigned Space

An indication that the instruction space in a school is used in the calculation of student capacity.

- 1 Yes
- 2 No

### 4060 Unassigned Space

An indication that the space in a school, including circulation, administration offices, support spaces, and common areas, is not part of the calculation for capacity.

- 1 Yes
- 2 No





# 4070 Space Utilization Area

The area in square feet measured between the principal wall that faces at or near floor level, including alcove spaces, and the outer limits of space designed to serve the activity. Structural space is excluded.

# 4080 Net Area of Instructional Space

The area of space directly used for instruction excluding circulation, administration, student services, and building support.

# 4090 Grade of Student Enrollment or Membership Number

The specific grade or combination of grades for student enrollment count.

- 1 Preschool
- 2 Pre-kindergarten
- 3 Kindergarten
- 4 First Grade
- 5 Second Grade
- 6 Third Grade
- 7 Fourth Grade
- 8 Fifth Grade
- 9 Sixth Grade
- 10 Seventh Grade
- 11 Eighth Grade
- 12 Ninth Grade
- 13 Tenth Grade
- 14 Eleventh Grade
- 15 Twelfth Grade
- 16 Grade 13
- 17 Ungraded

# 4100 Student Enrollment Number

The cumulative number of students registered in a school unit over a given period of time. Enrollment consists of initial membership plus additional enrollees during the specified time period.

# 4120 Student Membership Number

A nonduplicated count of students on the current rolls of a school as of a given date.

# 4140 Student Enrollment Projection Number

The number of students that may be assumed to enroll in a school or school system in the future, based on the number of live births, housing statistics, capture rate, historical cohort survival patterns, in and out migration into the district, and dropout rate. Projections are typically made for 3-, 5-, and 10-year intervals.

# 4150 Student Enrollment Projection Year

The year for the student enrollment projection.

### 4160 Service Population

The number of school-age children who reside within a school attendance area and are thus eligible for education and services by a school.

### 4170 Attendance Area Code

A unique number or alphanumeric code of an attendance area that the school or building serves assigned by a school, school system, state, or other agency or entity.

### 4180 School Attendance Area

A description of the geographical area that is encompassed by the enrollment boundaries of a school.

# 4190 School Assignment Method

The way students who reside within a school district are assigned to the schools.

- 1 Residential/geographic
  School district policy that requires students to attend a school that serves a designated geographical area.
- 2 Choice, including magnet or charter schools, with transportation School district policy that permits students to attend school outside of their attendance area and provides transportation to support this.
- 3 Choice, including magnet or charter schools, without transportation School district policy that permits students to attend school outside of their attendance area, but provides no transportation to support this.
- 99 Other

# 4200 Number of Students in Substandard Space

The number of students assigned to a space that is, according to state or local building codes or standards, considered deficient for providing basic education and support services.

### **4210** Number of Teaching Stations

The number of teaching stations, as defined by how many spaces have, or could have, a teacher assigned to them for classroom instruction.

# 4220 Classroom Use Type

Indication of the particular age group that receives instruction in the classroom.

- 1 Early childhood classroom

  A space with built-in equipment for use by a class that is organized to provide educational experiences in the years preceding first grade.
- 2 Elementary classroom

A space designed with built-in equipment for use by a class that is organized to provide educational experiences in, usually, the years first grade through sixth grade.





- 3 Secondary classroom—middle school/junior high/high school
  A space with special built-in equipment for use by a class that is organized to provide educational experiences in, usually, the years seventh grade through twelfth grade.
- 4 Resource classroomA space designed for general use by a group or class.
- 99 Other

# 3090 Classroom Identification Code

A unique number of alphanumeric code assigned to a room by a school, school system, state, or other agency or entity.

# 4230 Public Use Policy

A description of the policy that enables the community or other organizations to use all or part of a building for purposes other than general education.

# 4240 Hours of Public Use per Week

The number of hours that all or part of a building is used for purposes other than general education by the community or other organizations.

# 5000 Facilities Management

This category contains data elements regarding the methods of managing educational facilities, including information relative to the type of management, protocols, and services used to operate and administer a facility.

Number Data Element and Definition

### 5000 Facility Operations Management Type

The type of management arrangements whereby a district oversees and manages its facilities operations.

- 1 School district management The school district supervises and employs district staff in the schools and the central office for cleaning, maintenance, and repair.
- 2 Private sector management
  The school district contracts with a private sector company for the supervision and staffing for school-based cleaning, maintenance, and repair.
- 3 District and private sector management
  The school district supervises and employs district staff for cleaning, maintenance, and repair, but also contracts with a private sector company for support in the cleaning, maintenance, and repair of its schools and other facilities.
- 4 Nonschool public sector management
  School district building cleaning, maintenance, and repair are the responsibility
  of a nonschool governmental agency or public authority.
- 99 Other

# 5010 Facility Capital Program Management Type

The type of management organization for planning, design, and construction of major capital projects.

- 1 School district management The school district procures and oversees the design and construction services for its capital projects.
- 2 Private management
  The school district contracts with private program managers who procure and oversee the design and construction of its capital projects.
- 3 Nonschool public agency management
  A nonschool governmental agency procures and oversees the design and construction of the school district's capital projects. May be a municipal clerk of the works, separate building authority, or even the Army Corps of Engineers.

### 5020 Facilities Plan Type

The type of management and accountability plan.

1 Emergency response plan
A plan that addresses the immediate and short-term effects of an emergency or disaster. Response includes immediate actions to save lives, protect property, and meet basic human needs.





# 2 Maintenance plan

A plan that includes the specific scope, schedule, responsible party, estimated cost, and source of funds for routine, preventive, and predictive maintenance of a district or school.

# 3 Educational facilities master plan

A long-term plan (often 10 years) that describes the scope, schedule, and cost estimates to bring all facilities up to desired standards from current conditions.

### 4 Capital improvement plan

A 5- or 6-year plan, based on the master plan, that sets priorities and budgets for school-specific major capital projects, such as component replacement, system upgrades, whole or partial school modernization, new construction, and site acquisition.

# 5 Energy management plan

A plan that includes historical utility consumption and cost data and targets, with scope of work and schedule to meet cost and consumption targets.

# 6 Hazardous materials management plan

A plan that identifies hazardous materials in the building and/or site and describes scope of work, schedule, cost, and appropriate entities to carry out the plan.

### 99 Other

### 5030 Facilities Plan

A description of the management and accountability plan.

### 5040 Facilities Plan Cost

The estimated total amount of the facilities plan.

## 5050 Cleaning Standard

The standard for cleanliness, and benchmarks for how much space can be assigned to one properly supplied custodian to meet these standards.

### 1 Level 1 cleaning

"Spotless" cleaning, such as might be found in a hospital or corporate suite. One custodian should be able to clean 10,000 square feet in an 8-hour period.

### 2 Level 2 cleaning

Intensive cleaning, reserved for areas such as restrooms, special education areas, kindergarten areas, or food service areas. One custodian can clean approximately 11,000-18,000 square feet in an 8-hour period.

### 3 Level 3 cleaning

Cleaning required to ensure the health and comfort of building users. One custodian should be able to clean 19,000-25,000 square feet of space in 8 hours to this standard.

### 4 Level 4 cleaning

Not generally acceptable for a school environment. One custodian cleans 26,000-46,000 square feet in an 8-hour period.

5 Level 5 cleaning Not considered healthy. One custodian can clean 47,000-80,000 square feet in an 8-hour period.

### 5060 Maintenance Standard

The standard for maintenance of a component, system, or building.

- 1 Run to fail An approach to maintenance in which management allows equipment and parts to run until they break down or wear out beyond repair.
- 2 Routine

A work-order based approach to maintenance that addresses lists of broken items, deteriorated finishes or equipment/parts nearing the end of their life cycle, maintenance required as a result of normal wear and tear, equipment/parts that should be fixed or replaced during a regular work day eliminating the need for overtime pay.

3 Emergency

A plan that addresses the maintenance in which a critical system, component, equipment, or furnishing breaks down and must be repaired to secure the safety of students, staff, or visitors and/or for operation of the program or service to continue. Unexpected events beyond normal wear and tear may mandate overtime, as situations may have to be dealt with immediately.

4 Preventive

The process of performing scheduled equipment inspection, testing, and repair services. Activities are performed on a scheduled basis annually, or more frequently, to identify additional maintenance or required systems testing.

5 Predictive

The process of monitoring selected performance data for a system, component, or equipment against a baseline reference to identify and predict impending failures for just-in-time maintenance attention. A system of maintenance in which computers and software are used to forecast the failure of a piece of equipment based on its age, user demand, and various performance measures.

# 3040 Facility Standard

An indication of the district or state requirements or guidelines for the design and construction of school facilities.

- 1 Design guidelines
- 2 Space standards
- 3 Master construction specifications
- 4 Health and safety standards
- 5 Energy performance standards
- 6 Site guidelines
- 99 Other

# 5070 Baseline Utility Type

The type of utility in an equipment, building, or set of buildings.

- 1 Electricity
- 2 Natural gas
- 3 Oil
- 4 Water
- 5 Sewer
- 6 Telephone
- 7 Internet
- 99 Other

# 5080 Baseline Utility Cost

The calculated utility cost of operating and maintaining a utility before carrying out any utility efficiency improvements.

# 5090 Energy Conservation Measure (ECM)

The type of modification to, or replacement of, a piece of equipment or building shell/system that increases energy efficiency.

- 1 Window replacement
- 2 Installation of energy controls
- 3 HVAC replacement
- 4 Lighting replacement
- 5 Insulation improvements
- 99 Other

# 5100 Utility Provider Type

An indication of whether utilities are supplied to a site or a building by a company or provider.

- 1 Self-generated
- 2 Purchased

# 5110 Energy Source

The power source for a system.

- 1 Gas
- 2 Electric
- 3 Oil
- 4 Solar
- 5 Wind
- 6 Geothermal

- 7 Coal
- 8 Nuclear
- 9 Water
- 99 Other

# 5120 Energy Service Company (ESCo)

The name of the company that designs, procures, finances, installs, maintains, and guarantees the performance of energy conservation measures in an owner's facility or facilities.

# 5130 Estimated Cost to Eliminate Deferred Maintenance

The estimated cost to bring systems, components, finishes, fixtures, or equipment to a state of good repair.

# 5140 Work Request Type

A description of the work requested.

# 5150 Job Type

The type of trade needed to meet work order job requirements.

- 1 Carpentry
- 2 Custodial
- 3 Electrical
- 4 Safety and environmental
- 5 Glazing
- 6 Grounds
- 7 Energy management
- 8 Masonry
- 9 Painting
- 10 Plumbing
- 11 Roofing
- 12 HVAC
- 99 Other

# 5160 Requested Date of Completion

The month, day, and year that the school-based personnel initiating the work order request would like to have it completed.



# 5170 Work Order Priority

A determination of the urgency of a work order.

1 Emergency

Needs same-day response; use of overtime is authorized.

2 Regular

Needs scheduled response; use of overtime is not authorized.

3 Low

To be accomplished on an as-resources-permit basis.

### 5180 Work Order Date Scheduled

The month, day, and year that work is scheduled to take place (not necessarily the date requested).

### 5190 Work Order Time Scheduled

The time that work is scheduled to take place.

# 5200 Status of Work Order Request

The status of the work order request.

1 Open

A new request for work, not yet assigned to a worker.

2 Assigned

A work order assigned to a worker and in process.

3 Completed

A completed work order.

4 Reopened

A work order that was completed, but is now reopened.

# 5210 Work Order Date of Completion

The month, day, and year that the work order was completed.

# 5220 Facilities Management Emergency Type

The type of abnormal and urgent circumstances that disrupt the normal operation of the building, threaten the health and safety of the occupants, or require an emergency response.

- 1 Fire
- 2 Theft
- 3 Bomb threat
- 4 Terrorism
- 5 Act of violence
- 6 Hostage
- 7 Hurricane and tropical storm
- 8 Thunderstorm—severe
- 9 Earthquake

- 10 Winter storm
- 11 Debris flows or mudslide
- 12 Tsunami
- 13 Volcano
- 14 Wildfire—surface, ground, or crown fire
- 15 Extreme heat
- 16 Major chemical emergency
- 17 Gas leak
- 18 Emergency shelter need
- 19 Tornado
- 20 Flood
- 99 Other

# 5230 Emergency Repair

A description of the urgent restoration work on a piece of equipment, building, or grounds to original completeness or efficiency from a worn, damaged, or deteriorated condition.

# 5240 Name of Response Agency

The local, state, or federal agency other than the LEA that has primary responsibility for responding to an emergency situation.

# 5250 Hazardous Materials or Condition Type

The type of hazardous materials or conditions tested for at a site or building.

- 1 Asbestos
- 2 Lead
- 3 Mold
- 4 Underground storage tanks (USTs)
- 5 Radon
- 6 Pesticides
- 99 Other

# 5260 Hazardous Material/Condition Testing Date

The month, day, and year that the site or building is tested for a specific hazardous material.

# 5270 Hazardous Material/Condition

A description of the seriousness a threat or hazardous material poses.

# 5280 Location of Hazardous Materials/Conditions

The location at which the identified hazardous material is found.





#### 5290 Expected Remediation Date

The month, day, and year by which a hazardous condition of a site or building is expected to be remediated.

#### 5300 Safety/Security Violation

A description of the safety and security violation at the site or building.

#### 5310 Citation Date of Safety/Security Violation

The month, day, and year that the site or building is cited for safety or security violation.

#### 5320 Citation Issuing Agency

The name of the agency that issues the safety or security violation to the site or building.

#### 5330 Capital Improvement Project Type

The type or phase of a capital improvement project.

1 Site acquisition

The exploration, due diligence, and purchase related activities for the land acquisition.

2 Environmental clean-up of site

The due diligence and actual site clean-up of contaminated land.

3 Planning

The districtwide and site specific planning associated with the implementation of a capital improvement plan.

4 Design

The phase of a capital project whereby the specific space and construction document specifications are developed.

5 New construction

The creation of a new facility; also the addition, expansion, or extension of space to an existing facility.

6 Demolition

The complete removal of a structure, whether attached or stand-alone, that is not associated with a building renovation, remodeling, or new construction project.

7 Remodeling of interior space

A building project to improve the usability and quality of space.

8 Full modernization

A building improvement project that replaces all systems/components/fixtures to like-new condition and makes major modification to interior space layout and organization to meet program requirements, if needed.

9 Partial modernization

A building improvement project that involves multiple systems or components and some modification of interior design, but does not involve the complete removal and replacement of all systems and components and the complete redesign of the organization and layout of interior space.

- 10 Component or systems replacement
  The replacement of an individual system or component.
- 11 Exterior modernization Improvements to "like new" of roof, gutters, flashing, windows, exterior finish, and exterior doors.
- 12 Site improvements Modifications or improvements to parking lots, walkways, driveways, playgrounds, drainage, landscaping, retaining walls, fences, and other outside areas.
- 13 Landscaping Exterior beautification or landscaping of a site, enhancement of existing exterior areas, or development of new areas.
- 99 Other

#### 5340 Capital Project Delivery Method

The method for packaging, contracting, and managing capital improvement projects.

- 1 Design-bid-build
  - The traditional way of procuring public school design and construction services, where the school district hires an architect to fully design a school or building improvement, puts the construction documents out for competitive bid, and awards a construction contract to the lowest responsible bidder, who will build the school or make the improvement based on the architect's documents and in accordance with the school system's construction contract.
- 2 Construction management
  - A method by which a project is divided into several bid packages without a general contractor responsible for the overall cost and contract for the project. The successful bidders for the specific trades or work enter into a direct contract with the school district. Several bid packages can be bid at one time or spread over time.
- 3 Construction management at risk
  A project delivery system whereby the construction manager agrees to a maximum price contract for the satisfactory construction of a project.
- 4 General contractor method
  A method by which the general contractor is fully responsible for the selection of subcontractors and the overall cost of the contract for the project. The subcon
  - tractors for the specific trades or work enter into a direct contract with the general contractor.
- Design build
   A project delivery method where a single entity is responsible for both designing and constructing a capital improvement project.





#### 6 Fast track

A method by which a project is bid while portions of the project are still in the design phase. It generally incorporates some aspects of the construction management process.

#### 7 Job order contracting

Work assigned to approved contractors selected on competitively bid trade-specific but undetermined scope-of-work contracts, on a job order basis, up to a predetermined contract amount.

99 Other

#### 5350 Capital Project Work Type

The type of work required to complete a major capital project.

#### 1 Demographic research

The process of determining the characteristics of the local school system population and its projected changes over time.

#### 2 Planning

The phase of a capital project when educational specifications, financing, and management plans are developed for implementation.

#### 3 Site acquisition

The phase when land is purchased, assembled, or otherwise secured for new school construction.

#### 4 Architect/engineer selection

The process of selecting the architect and engineers who will develop the design for a capital project. The architect and engineers may be involved in developing education specifications and a feasibility study before design.

#### 5 Feasibility review

The phase of a capital project when the feasibility of meeting education specifications at a particular site, in a particular building, and within a budget or schedule are assessed.

#### 6 Schematic design

The phase when the architect develops one or more preliminary design solutions, each showing how program goals will be met. Schematic designs are conceptual, and are derived from requirements set forth in the educational specifications.

#### 7 Design development

The approved project concept is developed into a detailed set of drawings tailored to the realities of the project site. Drawings are to scale and individual spaces are shown in detail. Input of building occupants is important at this phase to assure a functional facility.

#### 8 Construction documents

The construction documents include all drawings, specifications, and contract information necessary to serve as a set of instructions to a contractor. Complete construction documents allow contractors to provide accurate bids and to construct the project as planned.

#### Number Data Element and Definition

- 9 Construction procurement The process of selecting the contractor responsible for implementing the approved design.
- 10 Demolition/site development
  The phase of a construction project when the site is prepared for new construction.
- 11 Construction
  The phase of a capital project when modernization, replacement, or new construction is under way.
- 12 Beneficial occupancy

  The users of a facility are able to occupy the new or improved space, even if all "punch list" items are not complete.
- 13 Close-out
  The phase of a capital project when final contract requirements have been met and the school system relieves the contractor of further responsibility.
- Post-occupancy evaluation
   A tool for assessing the quality of a completed capital improvement project. It usually takes place between 6 and 18 months after completion of a project.
- 99 Other

#### 5360 Capital Project Sequence

A description of the sequence of work required to complete a major capital project.

#### 5370 Capital Project Start Date

The month, day, and year a project is approved for expenditures.

#### 5380 Capital Project Scheduled Completion Date

The month, day, and year the project is scheduled for completion.

#### 5390 Capital Project Actual Completion Date

The month, day, and year the project is determined to be at substantial completion.





# 6000 Facilities Budget and Finance

This category contains data elements regarding the capital budget and operating funds of a facility, whether these funds are sufficient, and if the allocation and distribution of these funds are done under equitable conditions.

Number Data Element and Definition

#### 6000 Facilities Operations Type

The type of facilities operations coded into the operating budget.

- 1 Utilities
  - The cost of electricity, gas, oil, water, sewer, communications, and refuse collection and disposal.
- 2 Custodial personnel services
  The cost of salaries and benefits to custodians.
- 3 Custodial other than personnel services
  The cost of supplies and equipment for custodial services.
- 4 Custodial contracts
  The cost of contracts for custodial services.
- 5 Maintenance/repair personnel services
  The cost of salaries and benefits for maintenance and repair workers, and repair work.
- 6 Maintenance/repair other than personnel services
  The cost of supplies, materials, tools, and equipment for maintenance and repair work.
- 7 Maintenance/repair contracts
  The cost of contracts for maintenance and repair.
- 8 Management personnel services

  The cost of salaries and benefits of management staff of facilities operations.
- 9 Management other than personnel services
  The cost of personnel services for facilities management, including information technology, training, and other nonpersonnel items.
- Management contracts
  The cost of management contracts to support capital program or facilities management.
- 99 Other

#### 6010 Facilities Operating Budget

The estimated annual budget for the facility operation.

#### 6020 Facilities Capital Activity Type

The type of activity that is included in the capital financing and expenditures by virtue of a bond referendum or an appropriation.

1 Site acquisition Approved budgeted amount to acquire land for expansion or construction of schools or other school system facilities.

- 2 Environmental clean-up of site Approved budgeted amount for the environmental clean-up of land purchased or already owned by the school district.
- 3 Planning Approved budgeted amount for districtwide and site specific planning for capital projects.
- 4 DesignApproved budgeted amount for design of capital projects.
- 5 Building demolitionApproved budgeted amount for demolition of facilities.
- 6 Environmental clean-up of building
  Approved budgeted amount for environmental clean-up of buildings, occupied and not occupied, to comply with health and safety regulations for demolition and occupancy.
- 7 Construction Approved budgeted amount for the cost of construction.
- 8 Management contracts
  Approved budgeted amount for the cost of construction managers, program managers, or other management contracts.
- 9 Furniture, fixtures, and equipment Approved budgeted amount for the furniture, fixtures, and equipment for new, modernized, or renovated schools.
- 99 Other

#### 6030 Facilities Capital Budget

The legally approved budget amount for capital finance and expenditures by virtue of a bond referendum or an appropriation.

#### 6040 Date of Capital Expenditure

The month, day, and year that the funds for a capital project are encumbered, usually upon execution of a service or construction contract.

#### 6050 Capital Budget Year

The year for which the project has been approved for expenditures.

#### 6060 Capital Project Expenditure

The expenditure of bond proceeds for approved capital projects.

#### 6070 Total Capital Expenditure

The total expenditures related to the acquisition and disposition of property.

#### 6080 Capital Expenditure per Building

The annual expenditure from capital funds for a building.

#### 6090 Capital Expenditure per School

The annual expenditure from capital funds for a school.



#### 6100 Debt Financing Type

The type of long-term debt instrument, usually applicable to large capital projects, that obligates the issuer to pay back debt principal over a defined period at an agreed-upon rate of interest.

#### 1 General obligation bond

A debt for which repayment of principal and interest is a general liability to the issuing organization; it is legally backed by the full faith, credit, and assets of that organization.

#### 2 Municipal bond

A long-term debt instrument of a state or local government and/or its authorities and agencies; it is generally exempt from federal and state taxes.

#### 3 Revenue bond

A municipal long-term debt instrument that is secured and repaid from a specified stream of nontax-based revenue sources.

#### 4 Certificates of participation

A financing instrument that permits a school district or municipality to commit to making future payments without incurring "debt" by using a lease payment as "fees for services" that is subject to appropriate risk.

#### 5 Tax increment financing

A financing instrument that is used to finance improvements in developing and redeveloping areas. Taxes levied on the incremental growth in assessed valuation in the redevelopment district are used for debt repayment.

#### 99 Other

#### 6110 Bond Term

The length of time in years during which a bond may be repaid.

#### 6120 Bond Year

The year in which a bond must be repaid.

#### 6130 Bond Interest Rate

The interest rate payable by the borrower to the issuer of the bonds.

#### 6140 Discount Rate

The interest rate used to assess the present value of future cost and revenue streams.

#### 6150 Finance Options

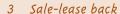
An alternative method to raise revenue and structure financing of school construction or improvements.

#### 1 Public/private development partnerships

A method of obtaining private sector capital and management to finance, design, and construct a school by trading public land or dedicating property taxes from private development or other public assets.

2 Energy saving performance contract

An agreement with a third party in which the overall performance of installed energy conservation measures is guaranteed by that party. A type of contract in which the contractor guarantees to meet certain standards for lighting, space conditioning (temperature and humidity), and other services over a period of time at a guaranteed price.



A project financing and development method that enables the school district to acquire a new school building through private financing and procurement. The school district sells the school property and then leases the improved school and site from a private owner/developer.

99 Other

#### 6160 Indebtedness Amount

The amount of indebtedness allowed by law to be carried by the school district.

#### 6170 Debt Amount

The amount of debt currently being carried by the school district.

#### 6180 Date of Last Bond Referendum

The month, day, and year of the last request to the public for approval to raise revenue that will enable borrowing by a school district, as is required and prescribed by law.

#### 6190 Percent Voters For Bond Question

The percent of voters who voted in favor of the most current bond referendum question(s).

#### 6200 Percent Voters Against Bond Question

The percent of voters who voted against the most current bond referendum question(s).

#### 6210 Tax Revenue Type

The tax revenue designated for repaying school construction bonds.

- 1 Local property tax
- 2 City commuter income tax
- 3 County or city sales tax
- 4 State property tax
- 5 State sales tax
- 6 State personal income tax
- 7 State corporate income tax
- 8 State lottery proceeds
- 9 State alcohol tax
- 10 State cigarette tax
- 11 Tobacco settlement revenue





#### Number Data Element and Definition

- 12 Federal income tax
- 13 Developer impact fees
- 99 Other

#### 6220 Nontax Revenue Type

The source of revenue for capital projects that are voluntarily contributed.

- 1 Individual contributions
- 2 Corporate contributions
- 3 Foundation contributions
- 4 Payments in lieu of tax contributions
- 99 Other

#### 6230 Public Education Mill Rate

The millage rate used to calculate property tax revenue for K-12 public education.

#### 6240 Total Assessed Value

The total assessed value of property that constitutes the basis for public borrowing.

#### 6250 Lease Type

The type of agreement that allows the use and possession of equipment or equipment systems from a third party in return for a regularly scheduled installment payment over an agreed-upon period.

#### 1 Capital lease

A lease agreement in which all costs of the equipment and financing are paid in equal installments during the lease period. At the end of the period, the lessee can purchase the equipment at a nominal value (often \$1.00); also called a financing lease or a lease-purchase agreement.

#### 2 Master lease

A single operating or capital lease agreement negotiated to authorize multiple capital equipment procurements over time; reduces transaction time and spreads financing costs over a larger base than is possible with the procurement of separate lease agreements for individual projects.

#### 3 Operating lease

A lease agreement in which the lessee is not required to pay the full costs of equipment and financing by the end of the lease period. Instead, the lessee may buy the equipment for its residual fair market value, or return the equipment to the lessor; also called a true lease.

#### 6260 Life-Cycle Cost

The total cost of acquiring, owning, operating, and disposing of a building, facility, or piece of equipment over its useful life.

#### 6270 Facility Replacement Value

The estimated cost of replacing a facility using current per square foot estimates of total project costs.

#### 6280 Expected Life of Facility

The time, in years, of the expected useful life of a facility for the purposes of depreciation.

#### 6290 Emergency Transportation Cost

The cost of transporting students who are temporarily served in other facilities pending repairs to a building to comply with federal, state, or local requirements.

#### 6300 Insurance Deductible

The dollar amount a school district must pay before its insurance will compensate it for loss.

#### 6310 Audit Type

The type of systematic review or audit.

- 1 Management audit
  - A systematic review of the decision-making, staffing, contracts, and governing procedures.
- 2 Financial audit
  - A systematic review of the approved budget and actual expenditures and encumbrances.
- 3 Performance audit
  - A systematic review of the quality of work performed and its relationship to outcomes.
- 4 Building commissioning
  - A systematic review of the quality and operation of a new or substantially improved building to determine adequacy of planning, design, construction, and operation.
- 5 Fiscal audit
  - A systematic review of the capacity of a school district or municipality to generate and sustain funds to support plans, projects, or other requirements.
- 6 Process auditA systematic review of procurement procedures and decision-making.
- 99 Other

#### 6320 Date of Last Audit

The month, day, and year of the latest review of the process, finances, or quality of work associated with capital projects.



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Authorizing Entity Name	.1195
Authorizing Entity Type	.1190
Baseline Utility Cost	.5080
Baseline Utility Type	.5070
Basic Classroom Design Type	.3080
Block Number Area (BNA)	. 1150
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Bond Year	.6120
Building Addition	.1300
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Building Area	.1320
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Building Name	.1170
Building Permanency	.1310
Building/Site Number	.1050
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Classroom Use Type
Cleaning Standard5050
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Community Use Space Type3200
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Compliance Status
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Component Identification Code
Condition of System or Component
Construction Date
Construction Date Type
Construction Material Type
Cooling System
Country Code
Current Building Use Type4000
Date of Capital Expenditure
Date of Certificate of Occupancy

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Data Element Name

Date of Last Audit
Date of Last Bond Referendum
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Emergency Repair
Emergency Transportation Cost
Energy Conservation Measure (ECM)
Energy Service Company (ESCo)
Energy Source
Estimated Cost to Eliminate Deferred Maintenance 513 0
Expected Life of Facility
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Exterior Finish Type
Facilities Capital Activity Type
Facilities Capital Budget
Facilities Management Emergency Type
Facilities Operating Budget
Facilities Operations Type
Facilities Plan
Facilities Plan Cost
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Facility Capital Program Management Type 5010
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Finance Options
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Installation Date
Institution Identification Code
Instructional Space Factor
Insurance Deductible
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Library/Media Center Specialty Space Type
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Name of Architect3000
Name of County
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Data Element Number

**Data Element Name** 

Nontax Revenue Type
Number of Stories
Number of Students in Substandard Space4200
Number of Teaching Stations
Operations/Maintenance Space Type
Outdoor Athletic/Physical Education Space Type
Ownership Entity Name
Ownership Entity Type
Percent Voters Against Bond Question
Percent Voters For Bond Question
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Space Identification Code	
Space Use Type	
Space Utilization Area	
Special Education Specialty Space Type	
State Abbreviation	
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State or Local Mandate Name	
Status of Work Order Request	
Street Number/Name	
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Student Enrollment Projection Year	4150
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System Identification Code	2010
System Type	2000
Tax Revenue Type	6210
Technology Wiring System	2090
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Total Capital Expenditure	6070
Unassigned Space	4060
Useful Life	2250
Utility Provider Type	5100
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Vertical Transportation System	2130
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Window Frame Material	2150
Work Order Date of Completion	5210

Data Element Name	Data Element Number
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Year Built	1210
Year of Last Modernization	1280
Zip Code.	1090

### Chapter 5

# Resources and Connections

Following is a resource list, including web sites, of professional organizations, federal agencies and programs, and state education agencies. Every effort has been made to verify the accuracy of all URLs listed in this Guide at the time of publication. If a URL is no longer working, try using the root directory to search for a page that may have moved.

## **Professional Organizations**

■ American Institute of Architects Committee on Architecture for Education (AIA/CAE)

#### http://www.aia.org/PIA/cae

The AIA/CAE is one of 22 professional interest areas of the American Institute of Architects. The CAE aims to serve architects interested in design of educational facilities and help them stay abreast of the most current trends. The committee puts on several conferences each year where members can obtain up-to-date information and network with each other.

■ Association of School Business Officials International (ASBO)

#### www.asbointl.org

ASBO International provides programs and services to promote the highest standards of school business management practices and professional growth, and the effective use of educational resources. It also provides a forum for the exchange of information among school management executives and public and private school districts. ASBO collaborated with Johnson Controls, Inc. on two publications to assist school business officials with the challenges of improving school facilities: Financing School Facilities and Maintenance & Operations Solutions: Meeting the Challenge of Improving School Facilities.

In another cooperative endeavor, ASBO International joined forces with the National Forum on Education Statistics to create the School Facility Management Task Force, which developed the *Planning Guide for Maintaining School Facilities*. This practical guide stresses the importance of safe and healthy facilities as tools for supporting effective education and communicates the vital role that appropriate facilities maintenance planning can play in ensuring safe and clean facilities.



#### ■ California's Coalition for Adequate School Housing (CASH)

#### www.cashnet.org

CASH promotes, develops, and supports the enactment of statewide and local funding alternatives for construction, maintenance, and modernization of public K-12 schools. Its web-based School Facilities Resources Center provides useful "how-to" materials that represent best practices in the planning, design, construction, occupancy, and maintenance of schools in California.

#### ■ Council of Educational Facility Planners International (CEFPI)

#### www.cefpi.org

CEFPI fosters, promotes, and disseminates best practices in school planning, maintenance, and operations. Through its publications, the *Issuetrak*, *The Communicator*, and the *Educational Facility Planner*, CEFPI provides practitioner-based information related to education facilities.

#### ■ National Association of Secondary School Principals (NASSP)

#### www.nassp.org

NASSP is a support organization for principals and others involved in the education field. It provides professional resources to promote effective change within the educational community. Its publication *Safe Schools: A Handbook for Practitioners* provides step-by-step instructions for assessing security at schools.

#### ■ National Clearinghouse for Educational Facilities (NCEF)

#### www.edfacilities.org

Funded by the U.S. Department of Education, NCEF is an information resource for people who plan, design, build, operate, and maintain K-12 schools. Its web site provides links to a wide variety of organizations and catalogues information on facility-related topics. Many of the resources in this Guide were obtained from the NCEF web site.

#### ■ National Education Association (NEA)

#### www.nea.org

NEA is America's oldest and largest organization committed to advancing the cause of public education. Founded in 1857, NEA represents more than 2.5 million members who work at every level of education, from preschool to university graduate programs. The NEA addresses issues such as class size reduction and school modernization.

#### ■ National Institute of Building Sciences (NIBS)

#### www.nibs.org

NIBS is a nongovernmental, nonprofit organization established by the Congress to serve the public interest by promoting a more rational regulatory environment for the building community, facilitating the introduction of new and innovative technology, and disseminating nationally recognized technical information. NIBS manages the National Clearinghouse for Educational Facilities.

#### ■ National School Plant Management Association (NSPMA)

#### www.nspma.com

NSPMA is a membership organization that facilitates the exchange of information on school plant management, maintenance, and care, and promotes the professional advancement of school plant management personnel. Its web site provides links to its state affiliates.

#### NetDay

#### www.netday.org

NetDay is a national education technology nonprofit organization whose mission is to help educators effectively use technology to boost educational results. NetDay began in 1995 as a grassroots volunteer effort by companies, educators, families, and communities to wire the nation's K-12 classrooms for Internet access. The first National Wiring Event was held on March 9, 1996, in California, where an estimated 50,000 volunteers wired 4,000 schools—approximately one-third of California's K-12 schools. Since then, NetDay has expanded to 40 states and mobilized over 500,000 volunteers to wire more than 75,000 classrooms across the country. Its web site contains information on how to organize a NetDay and provides an installation guide for wiring classrooms.

#### ■ 21st Century School Fund

#### www.21csf.org

The 21st Century School Fund is a national nonprofit organization that works to build public will and capacity to modernize urban school facilities through research, constituency building, and communications.

# Federal Agencies and Programs

#### **■** EnergySmart Schools

#### www.eren.doe.gov/energysmartschools

This program of the U.S. Department of Energy provides information on reducing energy costs through better school design and management practices. The EnergySmart Schools campaign offers schools training workshops, publications, recognition, direct technical assistance, financing options, and a host of other resources. Some of these resources are provided directly by DOE but many come from its public and private sector partners in Rebuild America. Its web site provides how-to guides for improving energy conservation in existing school buildings and designing energy-efficient new schools.

#### ■ Energy Star for Schools

#### http://yosemite1.epa.gov/estar/business.nsf/webmenus/Schools

Energy Star for Schools is a program sponsored by the U.S. Environmental Protection Agency to help schools and school districts track and manage energy use, evaluate facility financial performance, and locate energy-efficient products and services for use in new school construction. Free software and technical guidance are offered. Its *Technical Description for K-12 Schools*,

which is available on its web site, describes a Portfolio Manager approach to evaluation of schools in the portfolio manager, including the statistical basis of the calculations that result in a benchmark score for K-12 school buildings.

#### ■ E-Rate

#### www.ed.gov/Technology/eratemenu.html

The Schools and Libraries Universal Service Fund, popularly known as "E-Rate," was created as part of the Telecommunications Act of 1996 to make telecommunications services affordable for every school and library. Through this fund, eligible schools and libraries receive discounts of 20 percent to 90 percent on telecommunications services, internal connections, and Internet access. Although the Fund does not directly pay for desktop computers, learning software, or teacher/librarian training, schools and libraries can use the funds they save on telecommunications infrastructure to support these elements of a comprehensive technology plan. The E-Rate web site, a program of the U.S. Department of Education's Office of Educational Technology, provides general information, publications, and training conferences on the E-Rate program.

#### **■** General Accounting Office (GAO)

#### www.gao.gov

The GAO has produced several widely quoted reports on school facilities. These reports can be located either on the GAO web site or by using the search function on NCEF's home page, <a href="http://www.edfacilities.org/">http://www.edfacilities.org/</a>

#### ■ Indoor Air Quality (IAQ) in Schools

#### www.epa.gov/iaq/schools

IAQ in Schools is a program of the U.S. Environmental Protection Agency (EPA) that provides information on improving air quality through better school design and management practices. EPA's Indoor Environments Division developed the IAQ *Tools for Schools* to provide guidance and action items for facility managers, teachers, administrators, and heath officials. Also provided are tips on community sponsorship of IAQ programs in schools. Another publication, *Mold Remediation in Schools and Commercial Buildings*, presents guidelines for building managers, custodians, and others for dealing effectively with mold and moisture problems so as to protect the health of both building occupants and remediators. This publication can be downloaded from <a href="https://www.epa.gov/iaq/molds/index.html">www.epa.gov/iaq/molds/index.html</a>

#### ■ International Code Council

#### www.iccsafe.org/index.html

The International Code Council leads a cooperative effort to bring national uniformity to building codes. Among other standards documents, the ICC publishes the International Building Code, International Energy Conservation Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Private Sewage Disposal Code, International Property Maintenance Code, International Residential Code, International Zoning Code, and ICC Electrical Code Administrative Provisions.

#### ■ National Center for Education Statistics (NCES)

#### nces.ed.gov

NCES, within the Institute of Education Sciences of the U.S. Department of Education, is the primary federal entity for collecting and analyzing data related to education in this country and around the world. It supports the National Forum on Education Statistics, which commissioned this Guide. To download NCES data handbooks from its web site, search for "Handbook" in its electronic catalog. Finance information for elementary/secondary public or private education can be found at *nces.ed.gov/edfin* 

#### ■ Sandia National Laboratories

#### www.sandia.gov

Under the U.S. Department of Energy, the Sandia laboratories conduct programs to increase school security. Its popular publication *An Appropriate* and Effective Use of Security Technologies in U.S. Schools, available at <a href="https://www.ncjrs.org/school/home.html">www.ncjrs.org/school/home.html</a>, discusses various types of security measures, such as video surveillance, metal detection, entry-control technologies, and duress alarm devices, that can be used in schools.

#### ■ The U.S. Access Board

#### www.access-board.gov

The Access Board is an independent federal agency that advocates for accessibility for people with disabilities. Key responsibilities of the Board include developing and maintaining accessibility requirements for the built environment, transit vehicles, telecommunications equipment, and electronic and information technology; providing technical assistance and training on these guidelines and standards; and enforcing accessibility standards for federally funded facilities. The Board's web site provides guidelines and standards for implementing the requirements under the Architectural Barrier Act, a law requiring access to facilities designed, built, altered, or leased with federal funds; the **Rehabilitation Act**, which created the Access Board, and the Rehabilitation Act Amendments, which require access to electronic and information technology in the federal sector; the Americans with Disabilities Act, a major civil rights law prohibiting discrimination on the basis of disability in the private and public sectors; and the **Telecommunications Act** (Section 255), which requires access to new telecommunications and customer premises equipment where "readily achievable."

# **State Education Agencies**

#### ■ Alaska Department of Education and Early Development

www.eed.state.ak.us/facilities/home.html

This web site provides information on Alaska school capital projects, forms, costs, bond reimbursement and grant review, and facility renewal and replacement schedules.

#### ■ Arizona School Facilities Board

www.sfb.state.az.us/sfb/sfbmain/core-home.asp

This web site contains board policies, facilities assessment forms and documents, district data, and meeting summaries.

#### ■ Arkansas Department of Education

arkedu.state.ar.us/directory/publicschool\_finance\_p2.html#financial

This web site provides information on financial accountability, local fiscal services, school insurance, and contact information for additional state facilities programs and services.

#### California Department of General Services, Office of Public School Construction

www.opsc.dgs.ca.gov

This state-level office manages school construction, lease-purchase arrangements, and maintenance of schools. Its web site provides information about a construction cost index, the California Codes, and the *Deferred Maintenance Program Handbook*.

#### ■ California School Facilities Planning Division

www.cde.ca.gov/facilities

This web site is designed to assist school districts and their communities in creating well-planned K-12 learning environments in safe, clean, and up-to-date schools.

#### ■ Chicago Public Schools Capital Improvement Program

www.csc.cps.k12.il.us/capital

This web site provides information on the Chicago program's operations, public hearings, and budgets for fiscal years 2000-2004.

#### Connecticut State Department of Education, Division of Grants Management, School Facilities Unit

www.state.ct.us/sde/dgm/sfu/guide02/menus.htm

This web site provides detailed information on the state's construction grant process, educational specifications, state facilities assessment, school construction priority list, and current school projects and architect listing.

#### ■ Florida Department of Education Office of Educational Facilities

www.firn.edu/doe/cgi-bin/doehome/mcnv-plo

This web site offers basic technical support for facilities-related responsibilities and concerns of Florida public school boards and community colleges. Of special interest is the publication FISH (*Florida Inventory of School Houses*), a state-level facilities assessment system.

#### ■ Georgia Department of Education Facilities Services

www.doe.k12.ga.us/schools/facilities/index.asp

This department assists Georgia school systems in developing long-range capital improvement plans, acquiring funds, and reviewing architectural plans. Its web site provides data rules and guidelines.

#### ■ Illinois School Construction Program

www.cdb.state.il.us/schools/school1.htm

The Illinois State Board of Education and the Capital Development Board are jointly responsible for administering the School Construction Program, a state-funded building program for local school districts. Over a 5-year period, the program will provide \$2.5 billion in state funds for local school construction projects. When matched with required local funding, the program is expected to result in \$5 billion in new or improved public school facilities.

# ■ Illinois State Board of Education School Construction and Facility Services Division

www.isbe.state.il.us/construction/default.htm

This web site focuses on school facilities and programs that affect their construction, expansion, renovation, and maintenance. Its *Health, Life, and Safety Handbook* provides checklist items regarding safety in schools.

#### ■ Kentucky Department of Education, Division of Facilities Management

www.kde.state.ky.us/kde/Administrative+Resources/facilities/default.htm

The agency is responsible for ensuring sanitary, safe, and accessible construction of public school buildings, playground equipment, and classrooms. The division assists school districts by reviewing and approving all sites, new buildings, additions, alterations of existing buildings, and energy-saving projects. It also reviews and approves property disposal and property lease agreements and assists with hazardous materials and construction finance. The web site provides useful references and "best practice" materials related to education facilities.

#### ■ Maryland Public School Construction Program

www.pscp.state.md.us

This program provides funding for eligible and justified public school construction projects that are approved by the Board of Public Works. The web site provides references and facilities inventory information.

#### ■ Mississippi Department of Education, Office of School Building

#### www.mde.k12.ms.us/lead/osos/webpage.htm

The web site provides state construction submission rules and procedures, a profile of school district construction finance, records of school bond elections, roofing requirements, and department contact information.

#### ■ Missouri Division of School Services, School Governance & Facilities

#### www.dese.state.mo.us/divadm/govern

This web site offers information on student residency, school district boundaries, boards of arbitration, school elections, facility needs, and school safety.

## ■ New Hampshire Department of Education, Office of School Building Aid

www.ed.state.nh.us/buildingAid/building.htm

This site provides information on educational specifications, plans, technical specifications, costs, site considerations, and financing methodologies.

#### ■ New Jersey Department of Education, School Facilities

#### www.state.nj.us/njded/facilities/index.html

This site offers information and assistance on state educational facility planning, educational specifications, financing, and construction. *Facility Standards for Technology in New Jersey Schools* can be downloaded from the web site.

#### New Jersey Economic Development Authority's School Construction Program

#### www.njeda.com/school\_mstr.htm

This agency is responsible for the design and construction of school projects in districts receiving at least 55 percent of their construction costs from the state. This site provides information about bidding, prequalification of consultants, and contractor classification.

#### ■ New Jersey—The Education Law Center

#### www.edlawcenter.org

This nonprofit organization is dedicated to the pursuit of equal educational opportunity for poor children and children with disabilities in New Jersey. Its web site addresses equity issues in education facilities.

#### ■ New Jersey School Construction Initiative

#### http://www.state.nj.us/njded/news/2001/0301con.htm

The New Jersey Educational Facilities Construction and Financing Act, enacted in July 2000, launched the New Jersey School Construction Initiative—a comprehensive program for the design, renovation, repair, and new construction of primary and secondary schools. The initiative is the largest school construction program undertaken by the State of New Jersey and is one of the largest school construction programs in the United States.

#### ■ New York City School Construction Authority

#### www.nycsca.org/sca/home.html

This official New York City site contains program descriptions, forms, contact information, and employment opportunities.

#### ■ New York State Education Department, Office of Facilities Planning

#### www.emsc.nysed.gov/facplan

This office of the New York State Education Department coordinates statewide planning, design, and construction for New York Public Schools. This site provides access to their documents and guidelines.

#### ■ North Carolina School Design Clearinghouse

#### www.schoolclearinghouse.org

This site is designed for school districts that want to use a prototype design in the construction of school facilities. In addition to many documents on planning, the site includes cost data and publications.

#### North Dakota Department of Public Instruction, School Finance and Organization

#### www.dpi.state.nd.us/finance/index.shtm

This site contains information on state aid to schools, school construction approvals, and federal Qualified Zone Academy Bonds.

#### ■ Ohio School Facilities Commission

#### www.osfc.state.oh.us

The Commission provides funding, management oversight, and technical assistance to school districts for construction and renovation of school facilities. A school facility survey also is included on this site.

#### **■** Pennsylvania Center for Safe Schools

#### www.center-school.org/training.htm

The Center provides training, technical assistance, a clearinghouse of video and print materials, and a database of resources to help schools and school districts implement effective programs. Planning guides to create safe schools and develop crisis plans are included in this web site.

# Rhode Island Department of Education, Federal and State Funding, School Construction Aid

#### www.ridoe.net/funding/construction/schoolconstruction.htm

This web site is designed to enable school districts that need new facilities to receive help with their needs and planning assessments, as well as assistance in determining which construction costs may be eligible for state reimbursement. It also provides links to other sites related to school construction.

#### ■ Texas Education Agency Facility Funding and Standards

www.tea.state.tx.us/school.finance/facilities/index.html

This web site includes information on the state's Instructional Facilities Allotment (IFA) program and the federal Qualified Zone Academy Bond program, as well as state school facility standards.

#### Washington State Office of Public Instruction, School Construction Assistance Program

www.k12.wa.us/facilities

This site provides information on state matching funds and technical support for local school district construction projects and other K-12 school facilities-related programs.

#### ■ West Virginia School Building Authority

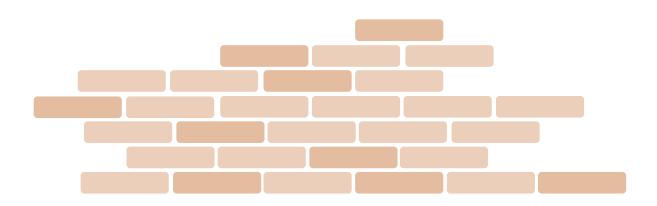
www.state.wv.us/wvsba/default.htm

This office facilitates and provides state funds for the construction and maintenance of school facilities. The web site provides policies and procedural manuals.

#### Wisconsin Department of Public Instruction, School Management Services

www.dpi.state.wi.us/dpi/dfm/sms/index.html

This site offers school facilities reporting information and a listing of state resources related to school construction and facilities management.



# Glossary of Selected Facilities-Related Terms

#### **Bond**

A written promise, generally under seal, to pay a specific sum of money, called the face value, at a fixed time in the future, called the date of maturity, and carrying interest at a fixed rate, usually payable periodically.

#### **Building**

One continuous enclosed structure that may or may not be connected with other structure by passageways. It includes the structure itself, together with all plumbing, sanitary, heating, ventilating, mechanical, and electrical systems in the structure, and all fixed equipment.

#### **Capital Project**

The acquisition or construction of major facilities, e.g., land, improvement, improvements to land, easements, building, or building improvements.

#### Custodian

A staff member who performs plant housekeeping and servicing activities consisting of the cleaning; operation of the heating, ventilating, and air-conditioning systems; and the servicing of building equipment.

#### **Equipment**

Any instrument, machine, apparatus, or set of articles that: 1) retains its original shape and appearance with use; and 2) is nonexpendable (i.e., if the article is damaged or some of its parts are lost or worn out, it is usually more feasible to repair it than to replace it with an entirely new unit).

#### **Facility**

All buildings, structures, and other stationary items that are located on a single site or on contiguous or adjacent sites and that are owned by and/or used for activities of an organizational unit such as a school or system.

#### Full-Time Equivalency (FTE)

The amount of time required to perform an assignment stated as a proportion of a full-time position, and computed by dividing the amount of time employed by the time normally required for a full-time position.



#### Landmark (Historic Building)

A building, district, site, or object that holds historical, cultural, or architectural significance on a local, state, or national level.

#### Local Education Agency (LEA)

An administrative unit at the local level which exists primarily to operate schools or to contract for educational services. These units may or may not be coextensive with county, city, or town boundaries.

#### Maintenance

The activities to keep the facility open, comfortable, and safe for use, and keep the grounds, buildings, and equipment in effective working condition and state of repair.

#### Repair

The construction or renewal of any part of an existing building for the purpose of its maintenance.

#### Room

A space enclosed with walls or partitions, of fixed or movable type, that provide an acceptable sound barrier.

#### School

An institution that provides preschool, elementary, and/or secondary instruction and may provide other education-related services to students; has one or more teachers; is located in one or more buildings; and has an assigned administrator.

#### Site

The land and all improvements on the land, other than structures, such as grading, drainage, drives, parking areas, walks, plantings, play-courts, and play-fields.

#### Space

An area within a building that is bounded by a floor, a ceiling at least 6 feet 6 inches in height, and on the sides by vertical planes that may be real (walls, partitions) or imaginary (e.g., open classroom spaces, separated by floor markings only).

#### State Education Agency (SEA)

The agency of the state charged with primary responsibility for coordinating and supervising public instruction, including the setting of standards for elementary and secondary instruction programs.



# Appendix: Calculated Data Elements

The calculated data elements in this section are considered important components of an education facility's data system. They are useful for comparisons between various entities as well as for measuring the health and status of the education facility. The calculated data elements are built through computations of unit records or data elements, including those from student, staff, finance, and facilities information systems.

#### Area per Student

The area, in net or gross square feet, divided by the number of assigned students per area.

#### Assessed Value per Student

The total assessed value of taxed property divided by the number of students.

#### **Average Class Size**

The total membership of classes of a given type, as of a given date, divided by the number of such classes.

#### **Average Work Order Completion Time**

The average duration of time between initiation and completion of work orders.

#### **Building Age**

The age of the building as defined by the current calendar year minus the year built.

#### Capital Expenditure per Square Foot

Total annual capital expenditure per building divided by the total gross square footage of the building.

#### Capital Expenditure per Student

The annual or multiyear aggregate of capital expenditures at a school divided by the membership as of a specific date or average annual membership of students.

#### **Debt Ratio**

The amount of indebtedness allowed by law compared to the amount of debt currently being carried by the school district.

#### Facility Operating Expenditure per Building

The total annual expenditures of all facilities-related operating budget items aggregated per building.



#### Facility Operating Expenditure per Square Foot

The total operating facility expenditure divided by the total gross floor area of the building.

#### Facility Operating Expenditure per Student

The total operating facility expenditure of a school divided by the total enrollment of the school.

#### **Hours of Facilities Staff Training**

Total hours per year of staff development required for facilities maintenance. Hours are unduplicated; for example, if 10 custodians each receive 20 hours of mandatory training this comprises 20 hours of staff development.

#### **Number of Buildings**

The number of separate buildings, both permanent and nonpermanent, on a site.

#### **Number of Classrooms**

The number of rooms in a school that are dedicated to the organized instruction of course content to groups of students.

#### Number of Emergency Repairs Completed Each Year

The number of repairs completed each year that were determined to be emergencies.

#### Number of Full-Time Equivalent (FTE) Facilities Staff

The number of FTE persons employed by a school district who perform functions related to facilities.

#### **Number of Nonpermanent Buildings**

The number of separate nonpermanent buildings.

#### **Number of Outstanding Work Orders**

Number of uncompleted requests for service or repair work.

#### **Student Enrollment Capacity**

The maximum number of students that a school building can satisfactorily accommodate at one time for the particular educational program and curriculum offered, as determined by a formula.

#### Student-Teacher Ratio

The number of students divided by the total teacher FTE count.



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